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FISHERIES PRODUCTION STATISTICS OF BRITISH COLUMBIA 1996

November, 2000

BRITISH COLUMBIA

Ministry of Agriculture, Food and Fisheries
BC Fisheries

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Foreword

This is the sixteenth annual issue of Fisheries Production Statistics published by the government of British Columbia. In February 1998 the Aquaculture and Commercial Fisheries Branch was transferred from the Ministry of Agriculture, Fisheries and Food (MAFF) to the new Ministry of Fisheries (BC Fisheries). This is the first issue to be published under the new Ministry. Prior to the 1981 edition, production statistics were published by the Department of Fisheries and Oceans, Canada dating back to 1951.

This document summarizes the production statistics reported by each of the fish processing plants licensed in British Columbia in 1996. In addition, data from fish buyers and brokers, and companies that leased facilities or had fish custom processed, as well as combined data from vessels involved in direct export to the United States or direct sales to the public, has also been included. The processed products and wholesale values published in this report reflect the disposition of the year's harvest. The data do not account for total industry sales during 1996. Instead finished products in inventory, but not yet sold, are valued at prevailing prices and included in the report. Also any imported fish that has been value added within the province and marketed as a product of Canada or British Columbia will be included in the wholesale values and product totals. The Fisheries Production Statistics of BC is the result of cooperation between industry and government and we would sincerely like to thank the numerous individuals who assisted in its completion.

The format of this edition is similar to previous years in that most of the text and tables are dedicated to fish landings and processed seafood production. All of the information regarding commercial fish landings and their values has been provided by the Department of Fisheries and Oceans (DFO) in preliminary form and is subject to revision. Some of DFO's preliminary salmon, herring and groundfish values have been revised upwards by BC Fisheries to more accurately estimate final values. Aquaculture harvest data are compiled from individual site reports submitted to BC Fisheries by all operations licensed in 1996; these numbers are final and will not be revised.

Information relating to licensing within the fishing and fish processing sectors, as well as the Consumer Price Index, are included, along with a section summarizing the average industry recovery rates as determined by BC Fisheries surveys and information provided by DFO. Also in this issue are the results of our 1996 employment survey of licensed seafood processing facilities.

All quantity data are presented in tonnes, except where otherwise indicated (1 tonne = 2204.6 pounds). Values are shown in thousands of dollars. For increased accuracy average prices are calculated prior to rounding. Totals in tables do not include confidential entries unless the confidentiality could be maintained by combining data from three or more companies. The following symbols are used consistently throughout the document:

*	Data are confidential, less than three companies reported
0	data are not confidential, but are less than 500 kg or $500
-	No data reported
n.e.s.	not elsewhere specified

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November, 2000

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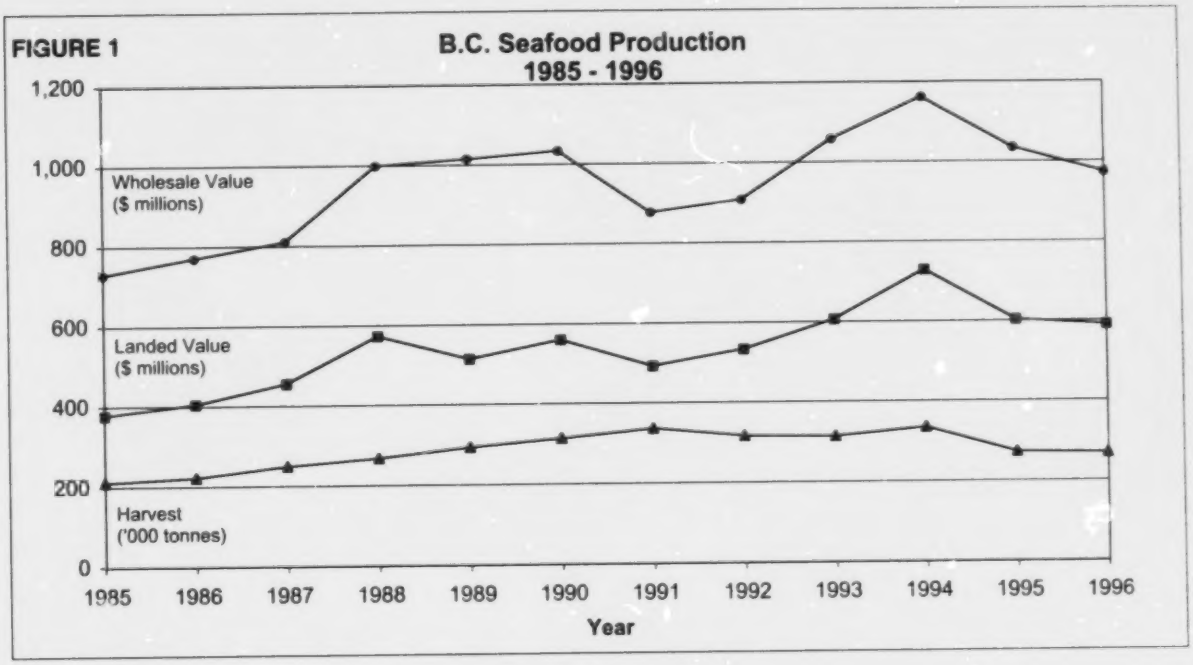
I Summary of the British Columbia Seafood Industry 1996

British Columbia's Seafood Industry - 1996

The British Columbia seafood industry, comprising aquaculture, commercial fishing, and fish processing sectors, contributed $468 million to the provincial gross domestic product. Commercial fishing was the fourth largest primary industry in the province after forestry, mining and agriculture. Seafood was the province's number one food export, generating export sales in excess of $858 million with shipments to more than 50 countries.

FIGURE 1



Landed Quantity

In 1996, the total provincial harvest remained relatively unchanged at 268,253 tonnes. Wild salmon and herring landings were each down 7 percent from the previous year. Halibut landings were up 9 percent as was the total groundfish harvest. Shellfish landings were steady at 31,414 tonnes.

Landed Value

The total landed value of the British Columbia seafood harvest fell 2 percent from $601.6 million in 1995, to $589.9 million in 1996. Halibut's landed value fell 5 percent to $32.5 million and a 6 percent share of the total. Herring prices were higher in 1996 with the total landed value up 6 percent over 1995, to $99.7 million and a 17 percent share of the total. With wild salmon prices up and farmed salmon prices down the combined landed value of B.C. salmon remained relatively unchanged at $255 million. The groundfish landed value fell 16 percent in 1996 to $74 million and a 13 percent share of the total. The shellfish landed value fell slightly to $126.7 million and a 21 percent share of the total.

Wholesale Value

In 1996, the wholesale value of B.C. seafood products was $984.8 million, down 5 percent from 1995. The combined salmon wholesale value was down 11 percent to $447.6 million and a 45 percent share of the provincial total. Herring products generated $191.1 million, down 8 percent from 1995. Halibut, groundfish and shellfish sales were all higher than in 1995 with increases of 11, 4, and 3 percent respectively.

Employment

The number of jobs in the seafood-processing sector, in 1996, fluctuated throughout the year. Employment ranged from a low of 3,080 in January to a high of 7,506 in August. The average number of persons employed in the seafood processing was 4,909.

Table 1 Footnotes

1 Includes salmon roe.
2 Includes herring spawn on kelp.
3 Includes 66,845 tonnes of hake valued at $11,347,000 delivered to foreign vessels in joint venture fishing arrangements.
4 Includes reedi, greenies, other rockfish, red snapper, and Pacific Ocean perch.
5 Includes idiot fish, shark, flounder and other fish.
6 Includes flounder, "other groundfish", fish meal and fish oil n.e.s. and animal feed.
7 Includes horse clams and farmed clams.
8 Includes scallops, squid, snails, crayfish, gooseneck barnacles, plankton and farmed shellfish n.e.s.
9 Includes squid, scallops, gooseneck barnacles, mussels, plankton, floating kelp, seaweed and other shellfish n.e.s.
10 Includes eulachons, mackerel, hagfish, smelt, anchovies, other fish n.e.s. and farmed freshwater fish n.e.s.
11 Includes eulachons, mackerel, smelt, other fish n.e.s. and farmed freshwater fish n.e.s.

Note: Halibut is reported dressed head-off, and, all other fish are reported in round weight.

TABLE 1 Quantity and Value of Fish Landings and Wholesale Value of Processed Products by Species - 1996

Species	Landed Quantity (tonnes)	Landed Value ($'000)	Wholesale Value ($'000)
Salmon			
Wild Salmon[1]	34,146	99,205	285,391
Salmon Aquaculture	27,757	155,934	162,249
Salmon Total	***61,903***	***255,139***	***447,640***
Herring [2]	***22,573***	***99,650***	***191,101***
Halibut	***5,431***	***32,536***	***50,958***
Groundfish			
Dogfish	4,000	2,400	2,846
Hake[3]	99,879	14,683	18,749
Lingcod	2,500	4,700	6,940
Pacific Cod	700	700	3,789
Pollock	2,100	900	2,938
Rockfish[4]	22,803	20,024	41,242
Sablefish	3,069	23,749	29,673
Skate	1,293	595	1,096
Sole	5,222	4,800	12,636
Turbot	4,596	1,400	2,147
Other Groundfish	8 [5]	11 [5]	9,156 [6]
Groundfish Total	**146,170**	**73,962**	**131,212**
Shellfish			
Clams[7]	2,423	8,272	9,575
Crabs	5,044	23,741	29,256
Geoducks	1,768	34,782	33,274
Octopus	197	716	567
Oysters	5,480	5,659	6,797
Sea Cucumbers	384	688	2,521
Sea Urchins	5,868	12,106	19,954
Shrimp & Prawns	9,392	38,641	49,525
Other Shellfish	858 [8]	2,095 [8]	2,290 [9]
Shellfish Total	**31,414**	**126,700**	**153,759**
Other Species			
Sturgeon	0	0	2
Trout	74	391	641
Tuna	457	1,230	8,647
Other	231 [10]	276 [10]	816 [11]
Other Total	**762**	**1,897**	**10,106**
Grand Total	**268,253**	**589,884**	**984,776**

TABLE 2 **Seafood Harvest Origin and Disposition - 1996**

SPECIES	DIRECT DELIVERY TO OR LANDED AT B.C. CO./PORTS				DIRECT DELIVERY TO U.S. CO./PORTS		GRAND TOTAL B.C. SEAFOOD HARVEST	
	Aquaculture Harvest		Commercial Fishery		Commercial Fishery		Aquaculture and Commercial	
	(tonnes)	($'000)	(tonnes)	($'000)	(tonnes)	($'000)	(tonnes)	($'000)
Salmon	***27,757***	***155,934***	***34,129***	***99,188***	***17***	***17***	***61,903***	***255,139***
Herring	-	-	***22,541***	***97,638***	***32***	***2,012***	***22,573***	***99,650***
Halibut	-	-	***5,431***	***32,536***	-	-	***5,431***	***32,536***
Groundfish								
Dogfish	-	-	2,951	1,938	1,049	462	4,000	2,400
Flounder	-	-	-	-	-	-	-	-
Hake	-	-	33,034	3,336	66,845 [1]	11,347 [1]	99,879	14,683
Lingcod	-	-	2,499	4,699	1	1	2,500	4,700
Pacific Cod	-	-	700	700	-	-	700	700
Pacific Ocean Perch	-	-	-	-	-	-	-	-
Pollock	-	-	2,100	900	-	-	2,100	900
Rockfish	-	-	22,801	20,022	2	2	22,803	20,024
Sablefish	-	-	3,069	23,749	-	-	3,069	23,749
Skate	-	-	1,280	591	13	4	1,293	595
Soles	-	-	5,222	4,800	-	-	5,222	4,800
Turbot	-	-	4,596	1,400	-	-	4,596	1,400
Other Groundfish	-	-	8	11	-	-	8	11
Groundfish Total	-	-	***78,260***	***62,146***	***67,910***	***11,816***	***146,170***	***73,962***
Shellfish								
Clams	979	4,427	1,444	3,845	-	-	2,423	8,272
Crabs	-	-	4,353	20,721	691	3,020	5,044	23,741
Geoducks	-	-	1,768	34,782	-	-	1,768	34,782
Octopus	-	-	197	716	-	-	197	716
Oysters	5,480	5,659	-	-	-	-	5,480	5,659
Sea Cucumbers	-	-	384	688	-	-	384	688
Sea Urchins	-	-	5,133	10,558	735	1,548	5,868	12,106
Shrimp & Prawns	-	-	6,396	34,778	2,996	3,863	9,392	38,641
Other Shellfish	142	860	516	1,055	200	180	858	2,095
Shellfish Total	***6,601***	***10,946***	***20,191***	***107,143***	***4,622***	***8,611***	***31,414***	***126,700***
Other Species								
Sturgeon	-	-	0	0	-	-	0	0
Trout	74	391	-	-	-	-	74	391
Tuna	-	-	457	1,230	-	-	457	1,230
Other	7	60	224	216	-	-	231	276
Other Total	***81***	***451***	***681***	***1,446***	-	-	***762***	***1,897***
Grand Total	**34,439**	**167,331**	**161,233**	**400,097**	**72,581**	**22,456**	**268,253**	**589,884**

1 Includes hake delivered to foreign vessels in joint venture fishing arrangements.

TABLE 3 **Landed and Wholesale Value of Fish and Fish Products**

1985 - 1996

Year	Excludes halibut and tuna landed by B.C. fish harvesters at U.S. ports and hake sold to foreign processors.		Includes halibut and tuna landed by B.C. fish harvesters at U.S. ports and hake sold to foreign processors.			
	Landed Value ($'000)	Wholesale Value ($'000)	Landed Value ($'000)	Change (%)	Wholesale Value ($'000)	Change (%)
1985	372,324 [1]	722,243	377,646	55	727,565	56
1986	394,525	759,341	404,687	7	769,410	6
1987	443,203	797,541	455,168	12	809,206	5
1988	560,736	987,406	572,643	26	998,909	23
1989	499,516	1,000,946	513,402	(10)	1,014,761	2
1990	546,358	1,021,570	558,589	9	1,032,486	2
1991	478,938	864,954	491,731	(12)	877,001	(15)
1992[1]	521,257	895,268	532,699	8	906,710	3
1993[1]	557,851	1,048,413	604,540	13	1,057,538	17
1994	714,497	1,148,037	728,146	20	1,161,686	10
1995	596,906	1,029,273	601,639	(17)	1,034,006	(11)
1996	578,537	973,429	589,884	(2)	984,776	(5)

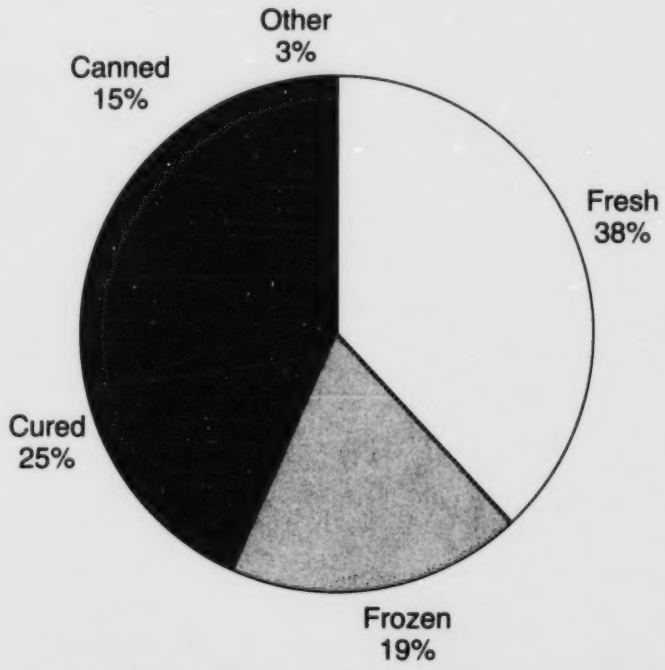
1 Includes tuna caught by Canadian fishers in U.S. waters and landed in Canada.
Includes the value of aquaculture production.

TABLE 4 **Regional Wholesale Value of Seafood Production by Product Category[1]**
1995 - 1996
($'000)

Product Category	Lower Mainland		Vancouver Island		Sunshine Coast		Central and North Coast[2]		Total B.C.	
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
Fresh	188,950	187,060	163,589	164,178	12,618	8,639	12,907	10,415	378,064	370,292
Frozen	129,631	142,595	22,452	18,425	3,098	5,826	12,771	14,852	167,952	181,698
Cured	222,280	200,792	8,977	9,094	-	229	37,325	34,612	268,582	244,727
Canned	84,702	69,493	4,382	5,621	-	-	92,651	70,492	181,735	145,606
Other	16,184	22,639	16,674	6,617	136	65	215	1,682	33,209	31,003
Grand Total	**641,747**	**622,579**	**216,074**	**203,935**	**15,852**	**14,759**	**155,869**	**132,053**	**1,029,542**	**973,326**

1 Excludes over the side sales of hake but includes aquaculture production and products derived from imported fish.
2 Includes a small amount of production from the Interior and Queen Charlotte Islands regions.

FIGURE 2 **Product Categories as a Share of the Total Wholesale Value of B.C. Seafood - 1996**



II Summary by Species

A) Salmon

This section contains data specifically on the British Columbia wild salmon commercial harvest and finished products. The wholesale value also includes products derived from imported salmon where it was processed in and marketed as a product of British Columbia or Canada. Detailed information on the salmon aquaculture harvests and products can be found in Section F - Aquaculture.

Gear Type

In 1996, 46.1 percent of all salmon was landed using gillnet gear, seiners accounted for 41.3 percent and the remaining 12.7 percent was landed using troll gear. With respect to species, seiners harvested 72 percent of the pink salmon, as well as 51 percent of the chum and 29 percent of the sockeye catch. Almost 70 percent of the sockeye, 47 percent of the chum, 94 percent of the chinook and virtually all of the steelhead was landed with gillnets. Troll gear accounted for 82 percent of the coho and 15 percent of the pink salmon catch.

Landings

In 1996, provincial salmon landings fell 27 percent to 34,146 tonnes from 49,936 tonnes in 1995. The landed value rose by 16 percent to $99.2 million from $85.9 million in 1995. The sockeye salmon harvest was up 47 percent to 15,481 tonnes and accounted for 45 percent of the total salmon landings for the year. Harvests for the other four salmon species showed significant declines from 1995 with chinook down 70 percent, pinks down 58 percent, chum down 46 percent and coho down 31 percent.

The prices paid to fishers for chum, pink and chinook were lower in 1996 than in 1995. Sockeye prices were strong at $5.05 per kg. which, combined with the larger harvest, generated $78.0 million and accounted for 79 percent of the total landed value of all salmon species.

Wholesale Value

In 1996, $447.6 million or 45 percent of the total wholesale value of all B.C. seafood resulted from the sale of salmon products. This included $162.2 million from farmed salmon products which are discussed further in Section F - Aquaculture.

The total wholesale value of wild salmon products fell 13 percent to $285.4 million from $328.1 million in 1995. Sockeye products generated $166.5 million and 58 percent of the wild salmon total wholesale value. Pink salmon products, at $51.4 million, contributed 18 percent with chum at $34.5 million, 12 percent, and coho at $24.3 million, 8 percent of the total. Wild salmon production contributed 30 percent to the total wholesale value generated by the fish processing industry, virtually the same as in the previous year.

Product Mix

Canned salmon at $144.0 million accounted for approximately 50 percent of the total salmon wholesale value, down from the 55 percent recorded in 1995. In total, the 1996 canned salmon pack consisted of 945,291 standard cases, down from the 1995 total of 1,200,130. In 1996, sockeye salmon accounted for 41 percent, pink 53 percent, chum 5 percent, and others less than 1 percent of the total cases produced.

Frozen dressed products were worth $67.2 million in 1996 and at 24 percent of the total salmon wholesale value, were the second most important commodities after canned salmon. Seventy-nine percent of the total volume of frozen dressed salmon products was reported as number one grade.

In 1996 smoked salmon products generated $20.3 million and contributed 7 percent of the total value of salmon products. Cold smoked salmon at $16.2 million accounted for 80 percent of the wholesale value of smoked salmon production. Specialty smoked salmon products accounted for $2.6 million and hot smoked products were worth $1.3 million

As the B.C. fish processing sector began to focus on value-added products, 1996 saw an increase in steak and fillet production for a value of $14.7 million and 5 percent of the salmon total wholesale value. For the same reason, fresh dressed salmon production was down 42 percent in volume and generated $12.5 million or almost 4 percent of the total wholesale value of all salmon products.

Other types of salmon products reported in 1996 included fresh and frozen round worth $1.9 million, salted products also worth $7.7 million, roe products worth $6.5 million and salmon by-products worth $3.9 million and portion pack/specialty items with a value of $6.7 million.

TABLE 5 **Landings of Salmon by Species, District and Statistical Area - 1996[1]**
(Round Weight in Tonnes)

District	Chinook	Sockeye	Coho	Pink	Chum	Steelhead	Total
Taku	27	121	18	-	-	0	166
Stikine	15	213	5	0	1	1	234
Taku/Stikine Total	***42***	***334***	***23***	***0***	***1***	***1***	***400***
North Coast							
1	0	39	764	1,637	87	0	2,528
2E	0	1	57	36	510	-	604
2W	-	-	4	0	4	-	8
3XY	46	2,519	487	2,383	1,276	0	6,711
3Z	5	147	10	28	28	0	218
4	208	8,742	286	2,441	769	1	12,447
5	5	610	115	437	116	0	1,283
6	2	41	63	709	170	0	987
7	7	1	14	30	285	-	338
8	61	69	80	582	1,558	0	2,351
9	0	-	-	-	-	-	0
10	0	25	4	1	8	0	38
30	-	-	-	-	-	-	-
North Coast Total	***335***	***12,196***	***1,884***	***8,285***	***4,813***	***1***	***27,514***
South Coast							
11	0	16	1	1	1	-	18
12	1	280	16	53	232	0	583
13	1	217	2	19	179	0	417
14	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-
16	-	1	-	-	-	-	1
17	-	-	-	-	-	-	-
18	-	13	0	0	2	-	14
19	-	-	-	-	5	-	5
20	2	365	9	0	3	0	379
21	-	0	113	0	1,200	-	1,313
22	-	-	-	-	-	-	-
23	-	11	624	1	2	0	637
24	-	0	186	0	7	0	193
25	-	0	111	0	1	0	112
26	0	0	186	1	3	0	189
27	-	0	216	14	4	0	235
South Coast Total	***5***	***902***	***1,463***	***88***	***1,638***	***0***	***4,096***
Fraser Area							
28	-	-	-	-	-	-	-
29AB	33	1,980	0	0	6	-	2,020
29C	0	3	-	-	36	-	39
29D	40	80	3	0	-	1	124
29E	-	-	-	-	-	-	-
Fraser Area Total	***73***	***2,063***	***3***	***0***	***42***	***1***	***2,183***
B.C. Total	**455**	**15,495**	**3,373**	**8,373**	**6,494**	**3**	**34,193**

1 Rows and columns may not total exactly, due to rounding. See Appendix I for Statistical Area Maps.
Source: Department of Fisheries and Oceans.

TABLE 6 **Landings of Salmon by Species and Gear**
1985 - 1996
(Round Weight in Tonnes)

Year	Chinook	Sockeye	Coho	Pink	Chum	Total[1]
GILLNET GEAR						
1985	525	13,461	857	4,012	6,211	25,218
1986	516	11,073	981	4,217	9,216	26,130
1987	270	6,619	380	4,464	4,236	16,026
1988	485	7,591	417	1,745	8,966	19,281
1989	789	12,475	687	2,687	3,955	20,616
1990	631	13,022	675	2,839	6,049	23,257
1991	890	10,407	614	2,937	4,541	19,410
1992	460	12,981	479	2,528	6,721	23,183
1993	625	18,536	383	1,846	7,153	28,549
1994	395	10,326	792	714	8,954	21,185
1995	262	5,947	365	2,024	6,480	15,081
1996	422	10,823	345	1,107	3,025	15,725
SEINE GEAR						
1985	733	14,735	1,410	25,996	15,769	58,676
1986	580	12,944	1,776	23,679	14,152	53,156
1987	355	6,283	985	15,415	6,413	29,465
1988	298	3,693	620	25,559	20,218	50,401
1989	557	17,266	1,194	19,068	4,846	42,936
1990	402	15,770	1,055	19,307	10,800	47,338
1991	408	10,312	790	25,828	5,202	42,543
1992	296	6,959	574	10,093	10,714	28,641
1993	267	19,281	326	9,491	9,199	38,566
1994	192	13,613	677	1,972	10,972	27,427
1995	64	4,155	321	12,288	4,512	21,339
1996	27	4,500	259	6,015	3,293	14,094
TROLL GEAR						
1985	4,211	3,373	6,710	7,692	1,666	23,669
1986	3,911	6,816	10,481	1,609	1,828	24,652
1987	4,623	2,133	7,050	7,042	352	21,203
1988	5,138	659	6,040	4,913	1,113	17,866
1989	3,889	4,642	6,871	9,250	521	25,174
1990	4,195	8,341	8,839	4,094	331	25,801
1991	3,760	4,492	8,649	6,331	493	23,725
1992	4,580	998	6,275	2,292	528	14,673
1993	3,924	4,712	3,607	4,709	921	17,874
1994	2,987	6,889	6,244	697	397	17,214
1995	1,184	431	4,180	5,456	1,122	12,373
1996	-	158	2,726	1,243	164	4,327

1 Totals include steelhead.
2 1985-1987 values include year-end bonus payments. Values for 1985 include direct delivery payments.

TABLE 7 **Share of Salmon Landings by Species and Gear - 1996**

(Round Weight)

Species	Gillnet		Seine		Troll[1]		Total
	(tonnes)	(%)	(tonnes)	(%)	(tonnes)	(%)	(tonnes)
Chinook	422	94.0	27	6.0	0	0.0	449
Sockeye	10,823	69.9	4,500	29.1	158	1.0	15,481
Coho	345	10.2	259	7.7	2,762	82.1	3,366
Pink	1,107	13.2	6,015	71.9	1,243	14.9	8,365
Chum	3,025	46.7	3,293	50.8	164	2.5	6,482
Steelhead	3	100.0	0	0.0	-	-	3
Total	**15,725**	**46.1**	**14,094**	**41.3**	**4,327**	**12.7**	**34,146**

1 Includes freezer troll.

TABLE 8 **Landed and Wholesale Value of Salmon by Product Type**

1985 - 1996

($'000)

Year	Landed[1]	Wholesale Value					
	Value	Canned	Fresh	Frozen	Roe	Other	Total
1985	246,696	258,646	14,137	206,647	12,019	20,794	512,243
1986	265,778	277,913	19,244	198,557	13,947	26,562	536,223
1987	212,063	171,573	24,773	189,824	9,180	30,251	425,601
1988	312,087	236,780	23,944	265,686	20,289	36,931	583,630
1989	256,100	337,519	23,603	190,441	7,751	27,566	586,880
1990	263,413	288,348	45,654	186,408	15,356	28,524	564,290
1991	172,473	176,760	27,894	138,715	8,566	21,857	373,792
1992	191,852	142,945	36,364	157,225	13,734	27,059	377,327
1993	201,088	193,039	35,328	180,751	17,506	30,885	457,509
1994	256,383	131,298	56,082	242,248	20,262	38,726	488,616
1995	85,851	181,213	22,787	73,456	8,789	41,829	328,074
1996	99,205	144,037	14,219	82,070	6,460	38,605	285,391

1 Includes salmon roe.

TABLE 9 Landed and Wholesale Value of Salmon by Species
1985 - 1996

Species	Landed Quantity (round tonnes)	Landed Value ($'000)	Average Landed Price ($/kg)	Wholesale Value[1] ($'000)	Average Wholesale Price ($/kg)	Landed Value as a Percent of Wholesale Value (%)
Chinook						
1985	5,469	25,564	4.67	41,433	7.58	61.70
1986	5,007	19,658	3.93	31,206	6.23	62.99
1987	5,249	30,527	5.82	41,489	7.90	73.58
1988	5,921	43,795	7.40	57,979	9.79	75.54
1989	5,234	20,157	3.85	34,071	6.51	59.16
1990	5,228	20,484	3.92	35,627	6.81	57.50
1991	5,058	19,640	3.88	28,178	5.57	69.70
1992	5,336	24,445	4.58	32,774	6.14	74.59
1993	4,816	14,587	3.03	30,526	6.34	47.79
1994	3,573	14,137	3.96	25,378	7.10	55.71
1995	1,510	5,469	3.62	12,279	8.13	44.54
1996	449	1,600	3.56	6,153	13.70	26.00
Sockeye						
1985	31,569	120,428	3.81	206,338	6.54	58.36
1986	30,833	143,270	4.65	237,871	7.71	60.23
1987	15,035	87,381	5.81	147,997	9.84	59.04
1988	11,943	96,408	8.07	150,134	12.57	64.21
1989	34,383	169,272	4.92	291,198	8.47	58.13
1990	37,133	160,734	4.33	290,504	7.82	55.33
1991	25,211	84,640	3.36	157,103	6.23	53.88
1992	20,938	110,387	5.27	172,355	8.23	64.05
1993	42,529	140,633	3.31	271,286	6.38	51.84
1994	30,828	195,202	6.33	293,349	9.52	66.54
1995	10,533	40,687	3.86	113,258	10.75	35.92
1996	15,481	78,000	5.04	140,502	9.08	55.52
Coho						
1985	8,977	26,555	2.96	48,362	5.39	54.91
1986	13,238	39,264	2.97	66,090	4.99	59.41
1987	8,415	33,747	4.01	61,803	7.34	54.60
1988	7,077	37,688	5.33	59,134	8.36	63.73
1989	8,752	19,335	2.21	45,481	5.20	42.51
1990	10,569	28,065	2.66	53,292	5.04	52.66
1991	10,052	25,267	2.51	41,660	4.14	60.65
1992	7,328	20,608	2.81	35,791	4.88	57.58
1993	4,316	10,912	2.53	19,836	4.60	55.01
1994	7,713	22,616	2.93	42,532	5.51	53.17
1995	4,866	13,429	2.76	27,171	5.58	49.42
1996	3,366	10,200	3.03	23,630	7.02	43.17

1 Does not include the wholesale value derived from imported salmon canned in British Columbia.

TABLE 9 *(continued)*

Landed and Wholesale Value of Salmon by Species
1985 - 1996

Species	Landed Quantity (round tonnes)	Landed Value ($'000)	Average Landed Price ($/kg)	Wholesale Value[1] ($'000)	Average Wholesale Price ($/kg)	Landed Value as a Percent of Wholesale Value (%)
Pink						
1985	37,700	38,979	1.03	115,160	3.05	33.85
1986	29,505	25,691	0.87	96,812	3.28	26.54
1987	26,921	33,479	1.24	102,293	3.80	32.73
1988	32,217	49,303	1.53	160,956	5.00	30.63
1989	31,004	33,481	1.08	121,199	3.91	27.62
1990	26,240	26,981	1.03	90,810	3.46	29.71
1991	35,096	29,971	0.85	81,289	2.32	36.87
1992	14,913	10,805	0.73	52,794	3.54	20.47
1993	16,046	11,537	0.72	52,393	3.27	22.02
1994	3,383	2,346	0.69	17,318	5.12	13.55
1995	19,767	14,291	0.72	52,534	2.66	27.20
1996	8,365	4,600	0.55	24,034	2.87	19.14
Chum						
1985	23,646	34,755	1.47	75,907	3.21	45.79
1986	25,197	37,614	1.49	77,904	3.09	48.28
1987	11,000	26,779	2.43	55,926	5.08	47.88
1988	30,297	84,621	2.79	145,581	4.81	58.13
1989	9,322	13,778	1.48	42,085	4.51	32.74
1990	17,181	27,053	1.57	61,856	3.60	43.74
1991	10,236	12,884	1.26	33,697	3.29	38.23
1992	17,964	25,523	1.42	62,520	3.48	40.82
1993	17,273	23,345	1.35	56,251	3.26	41.50
1994	20,323	21,999	1.08	68,287	3.36	32.22
1995	12,115	11,816	0.98	41,379	3.42	28.56
1996	6,482	4,800	0.74	33,225	5.13	14.45
Steelhead						
1985	202	389	1.92	857	4.24	45.39
1986	158	277	1.75	895	5.66	30.95
1987	75	147	1.96	445	5.93	33.03
1988	93	250	2.69	842	9.05	29.69
1989	32	58	1.81	257	8.03	22.57
1990	45	83	1.84	401	8.91	20.70
1991	26	38	1.46	286	11.00	13.29
1992	18	31	1.72	126	7.00	24.60
1993	8	13	1.63	43	5.38	30.23
1994	5	9	1.80	42	8.40	21.43
1995	4	6	1.50	44	11.00	13.64
1996	3	5	1.67	14	4.67	35.71

1 Does not include the wholesale value derived from imported salmon canned in British Columbia.

TABLE 10

Wholesale Value of Salmon by Species
1985 - 1996
($'000)

Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead	Not Classified	Total Wholesale Value
1985	41,435	206,810	48,762	135,376	76,705	857	2,298	512,243
1986	31,235	244,337	68,307	108,403	79,707	895	3,339	536,223
1987	41,505	154,162	63,025	106,330	56,540	445	3,594	425,601
1988	57,979	154,054	59,350	161,690	146,086	842	3,629	583,630
1989	34,153	297,181	46,560	162,389	42,655	257	3,685	586,880
1990	35,794	301,734	53,991	106,570	62,632	402	3,167	564,290
1991	28,181	162,665	41,169	105,709	33,891	287	1,890	373,792
1992	32,774	183,498	35,930	58,736	62,900	126	3,363	377,327
1993	30,671	279,536	19,888	70,066	56,352	43	953	457,509
1994 [1]	25,463	297,397	43,322	51,769	68,360	42	2,263	488,616
1995	12,280	148,075	29,163	94,461	41,989	44	2,062	328,074
1996	6,164	166,543	24,254	51,385	34,452	14	2,579	285,391

1 Revised data.

TABLE 11 **Production and Utilization of Salmon by Species**

1995 - 1996

Species	Unit	1995 Quantity	1995 Value ($'000)	1995 Average Price[1]	1996 Quantity	1996 Value ($'000)	1996 Average Price[1]
Chinook							
Canned	48 lb cases	1,562	239	152.75	2,200	732	332.93
Fresh Round	'000 kg	10	26	2.63	20	62	3.11
Fresh Dressed	'000 kg	216	1,464	6.79	151	1,006	6.63
Frozen Round	'000 kg	-	-	-	*	*	5.67
Frozen Dressed	'000 kg	898	6,443	7.16	266	1,682	6.30
Frozen Steaks & Fillets	'000 kg	78	801	10.26	18	298	16.18
Salted	'000 kg	57	698	12.18	15	169	10.99
Smoked	'000 kg	108	2,230	20.71	72	1,521	21.18
Roe[2]	'000 kg	6	66	11.50	4	51	12.80
Caviar[3]	'000 kg	8	160	21.24	9	182	19.58
Portion Pack	'000 kg	2	24	13.90	20	461	22.95
Minced	'000 kg	12	70	5.98	*	*	13.34
Chinook Total		-	***12,280***	-	-	***6,164***	-
Sockeye							
Canned	48 lb cases	334,953	87,502	261.24	383,331	93,479	243.86
Fresh Round	'000 kg	384	1,514	3.94	335	1,388	4.14
Fresh Dressed	'000 kg	841	5,539	6.59	459	3,991	8.71
Frozen Round	'000 kg	*	*	5.51	*	*	12.13
Frozen Dressed	'000 kg	2,538	21,013	8.28	4,614	40,027	8.68
Frozen Steaks & Fillets	'000 kg	275	3,357	12.22	293	4,323	14.77
Salted	'000 kg	740	7,729	10.44	534	7,469	13.98
Smoked	'000 kg	800	20,188	25.25	538	12,128	22.57
Roe	'000 kg	37	174	4.65	49	276	5.61
Caviar[3]	'000 kg	30	342	11.35	22	552	25.37
Portion Pack	'000 kg	*	*	13.65	119	2,823	23.68
Minced	'000 kg	36	110	3.07	*	*	8.62
Sockeye Total		-	***148,075***	-	-	***166,543***	-
Coho							
Canned	48 lb cases	37,501	6,755	180.14	16,254	2,686	165.31
Fresh Round	'000 kg	28	59	2.08	13	41	3.20
Fresh Dressed	'000 kg	517	2,189	4.23	551	2,462	4.47
Frozen Round	'000 kg	*	*	3.22	7	12	1.76
Frozen Dressed	'000 kg	2,841	14,117	4.97	2,440	12,607	5.17
Frozen Steaks & Fillets	'000 kg	224	2,324	10.36	220	2,121	9.63
Salted	'000 kg	*	*	12.42	*	*	11.44
Smoked	'000 kg	145	3,252	22.26	109	2,256	20.73
Roe	'000 kg	5	15	3.26	11	66	5.75
Caviar[3]	'000 kg	2	23	11.58	*	*	14.33
Portion Pack	'000 kg	*	*	7.71	*	*	9.74
Minced	'000 kg	13	31	2.41	*	*	5.29
Coho Total		-	***29,163***	-	-	***24,254***	-

TABLE 11 — **Production and Utilization of Salmon by Species**

(continued) — **1995 - 1996**

Species	Unit	1995 Quantity	1995 Value ($'000)	1995 Average Price[1]	1996 Quantity	1996 Value ($'000)	1996 Average Price[1]
Pink							
Canned	48 lb cases	773,227	81,497	105.40	49,661	43,801	87.66
Fresh Round	'000 kg	325	566	1.74	48	42	0.88
Fresh Dressed	'000 kg	1,005	2,121	2.11	339	668	1.97
Frozen Round	'000 kg	-	-	-	*	*	1.79
Frozen Dressed	'000 kg	3,483	7,980	2.29	2,245	4,618	2.06
Frozen Steaks & Fillets	'000 kg	109	689	6.32	199	805	4.06
Salted	'000 kg	*	*	5.70	-	-	-
Smoked	'000 kg	66	1,193	18.26	30	426	14.05
Roe[2]	'000 kg	55	228	4.43	31	140	4.52
Caviar[3]	'000 kg	22	125	5.58	1	18	17.46
Portion Pack	'000 kg	-	-	-	*	*	20.02
Minced	'000 kg	*	*	1.13	*	*	2.07
Pink Total		-	***94,461***	-	-	***51,385***	-
Chum							
Canned	48 lb cases	52,887	5,220	98.70	43,845	3,339	76.15
Fresh Round	'000 kg	710	1,050	1.48	193	213	1.10
Fresh Dressed	'000 kg	4,059	8,249	2.03	2,331	4,345	1.86
Frozen Round	'000 kg	*	*	1.90	71	120	1.70
Frozen Dressed	'000 kg	5,085	11,139	2.19	4,579	8,231	1.80
Frozen Steaks & Fillets	'000 kg	759	5,510	7.26	1,137	7,125	6.26
Salted	'000 kg	*	*	11.57	*	*	8.82
Smoked	'000 kg	342	2,942	8.63	391	4,002	10.20
Roe[2]	'000 kg	97	680	7.05	77	584	7.57
Caviar[3]	'000 kg	252	6,892	27.42	212	4,591	21.63
Portion Pack	'000 kg	*	*	8.90	176	1,811	10.34
Minced	'000 kg	*	*	1.88	*	*	1.34
Chum Total		-	***41,989***	-	-	***34,452***	-
Steelhead							
Fresh Round	'000 kg	0	0	1.85	0	0	1.94
Fresh Dressed	'000 kg	2	7	5.08	0	1	2.50
Frozen Round	'000 kg	*	*	3.11	-	-	-
Frozen Dressed	'000 kg	2	4	3.31	2	13	4.92
Smoked	'000 kg	*	*	27.42	*	*	20.26
Steelhead Total		-	***44***	-	-	***14***	-

TABLE 11 **Production and Utilization of Salmon by Species**

(continued) **1995 - 1996**

Species	Unit	1995 Quantity	1995 Value ($'000)	1995 Average Price[1]	1996 Quantity	1996 Value ($'000)	1996 Average Price[1]
All Salmon [4]							
Canned	48 lb cases	1,200,130	181,213	151.00	945,291	144,037	152.37
Fresh Round	'000 kg	1,457	3,215	2.20	609	1,746	2.87
Fresh Dressed	'000 kg	6,640	19,572	2.95	3,831	12,473	3.25
Frozen Round	'000 kg	16	54	3.38	127	220	1.74
Frozen Dressed	'000 kg	14,859	60,721	4.09	14,146	67,178	4.75
Frozen Steaks & Fillets	'000 kg	1,445	12,681	8.77	1,867	14,672	7.85
Salted	'000 kg	802	8,470	10.56	549	7,638	13.47
Smoked	'000 kg	1,463	29,873	20.41	1,140	20,333	17.83
Roe[2]	'000 kg	206	1,223	5.95	172	1,117	6.90
Caviar[3]	'000 kg	315	7,566	24.05	244	5,343	21.71
Portion Pack	'000 kg	112	1,135	10.27	436	6,675	15.32
Minced	'000 kg	111	289	2.63	99	211	4.76
Other[5]	'000 kg	-	2,062	0.00	-	3,748	-
Grand Total Salmon		-	**328,074**	-	-	**285,391**	-

1 Average Price: Canned Salmon $/48-lb. case; all other salmon products $/kg.
2 Includes roe for bait products.
3 Includes suchiko products.
4 The totals for All Salmon also include those items identified as confidential in the individual species product breakdowns providing the confidentiality could be maintained.
5 Includes offal, offal meal, oil, heads, bait, milts, animal feed, and other products that could not be allocated to a particular species. Also includes the values of confidential items where less than three companies reported.

TABLE 12 Comparison of the 1996 Canned Salmon Pack to the 12-Year-Average Pack 1985 - 1996

Species	1985 - 1996 Average (48 lb cases)	1996 (48 lb cases)	Difference (%)
Chinook	4,147	2,200	(47)
Sockeye	456,301	383,331	(16)
Coho	37,643	16,254	(57)
Pink	712,081	499,661	(30)
Chum	119,453	43,845	(63)
Steelhead	301	-	(100)
Total	**1,329,926**	**945,291**	(29)

TABLE 13 Wholesale and Net Selling Prices of Canned Salmon by Species - 1996[1]

Species	Quantity (48 lb cases)	WHOLESALE Value ($'000)	WHOLESALE Average Price ($/48 lb case)	NET SELLING Value ($'000)	NET SELLING Average Price ($/48 lb case)
Chinook	2,200	732	332.93	726	329.84
Sockeye	383,331	93,479	243.86	90,823	236.93
Coho	16,254	2,687	165.31	2,653	163.20
Pink	499,661	43,801	87.66	40,418	80.89
Chum	43,845	3,339	76.15	2,851	65.03
Steelhead	-	-	-	-	
Total	**945,291**	**144,038**	-	**137,471**	-

1 Fish processors were requested to report both a final wholesale value and a net selling value for their canned salmon. The final wholesale value represents gross sales based on company invoices. The net selling value refers to the final selling price after promotions, case allowances, cash discounts and other trade discounts.

TABLE 14

Canned Salmon Pack by Year

1985 - 1996

(48 lb case)

Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead	Total
1985	4,769	583,579	39,559	1,002,477	269,070	1,025	1,900,479
1986	6,417	599,320	82,375	900,782	264,282	599	1,853,775
1987	3,667	309,597	29,546	602,539	62,909	424	1,008,682
1988	3,092	206,715	23,715	734,329	215,586	620	1,184,057
1989	8,855	634,429	66,639	935,033	100,525	235	1,745,716
1990	7,004	731,791	53,080	777,308	115,947	487	1,685,617
1991	3,883	431,440	39,408	1,023,660	31,209	217	1,529,817
1992	3,098	315,016	23,582	389,339	102,961	*	833,996
1993	3,323	630,396	15,902	516,776	77,685	-	1,244,082
1994	1,899	305,049	24,159	389,840	96,535	-	817,482
1995	1,562	334,953	37,501	773,227	52,887	-	1,200,130
1996	2,200	383,331	16,254	499,661	43,845	-	945,291

TABLE 15

Average Wholesale Price of Canned Salmon by Year

1985 - 1996

($/48 lb case)

Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead
1985	105.87	201.61	150.18	111.38	84.69	94.39
1986	103.26	236.11	177.61	111.32	78.64	99.12
1987	102.74	266.34	176.66	128.05	100.29	126.64
1988	150.44	334.27	211.14	180.85	136.02	139.51
1989	144.33	271.37	213.06	146.80	125.26	113.37
1990	104.77	236.11	166.88	119.84	110.12	102.23
1991	85.60	190.57	150.76	83.74	81.04	90.18
1992	189.73	251.92	179.32	122.60	107.20	90.00
1993	177.42	201.25	164.92	106.43	102.53	-
1994	195.40	235.66	188.23	116.09	95.68	-
1995	152.75	261.24	180.14	105.40	98.70	-
1996	332.93	243.86	165.31	87.66	76.15	-

TABLE 16 Quantity and Wholesale Value of Dressed Salmon Production by Species - 1996

Species	FRESH DRESSED						FROZEN DRESSED						TOTAL FRESH/FROZEN DRESSED		
	Head-On			Head-Off			Head-On			Head-Off			Head-On and Head-Off		
	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)
Red Chinook	91	643	7.08	49	310	6.31	19	88	4.59	155	800	5.16	314	1,841	5.86
Pink Chinook	*	*	3.88	*	*	4.20	-	-	-	2	12	3.91	2	12	3.94
White Chinook	2	13	5.56	7	32	4.32	*	*	3.96	82	751	9.15	91	796	8.43
Sockeye	109	933	8.59	350	3,058	8.74	1,068	9,113	8.54	3,546	30,914	8.72	5,073	44,018	8.68
Coho	426	1,824	4.28	125	638	5.12	276	1,108	4.03	2,164	11,499	5.31	2,991	15,069	5.04
Pink	79	166	2.10	260	502	1.93	658	1,276	1.94	1,587	3,342	2.10	2,584	5,286	2.04
Silver Brite Chum	74	237	3.18	1,530	3,063	2.00	41	67	1.68	1,367	3,320	2.43	3,012	6,687	2.22
Semi Brite Chum	8	17	2.06	362	689	1.90	71	130	1.86	1,532	2,554	1.67	1,973	3,390	1.72
Dark Chum	6	5	0.84	351	334	0.95	210	419	1.99	1,350	1,722	1.28	1,917	2,480	1.29
Steelhead	*	*	5.17	0	1	1.94	0	1	5.24	1	4	4.53	1	5	4.51
Total	**795**	**3,838**	4.82	**3,034**	**8,627**	2.84	**2,343**	**12,202**	5.20	**11,786**	**54,918**	4.66	**17,958**	**79,584**	4.43

TABLE 17 Quantity and Wholesale Value of Frozen Dressed Salmon Production by Species and Grade - 1996

Species	FROZEN DRESSED HEAD-ON						FROZEN DRESSED HEAD-OFF						TOTAL FROZEN DRESSED		
	No. 1 Grade			Other Grades			No. 1 Grade			Other Grades			All Grades		
	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)	(tonnes)	($'000)	($/kg)
Red Chinook	3	16	5.56	16	72	4.41	99	587	5.91	56	213	3.83	174	888	5.16
Pink Chinook	-	-	-	-	-	-	2	12	4.87	*	*	3.24	2	12	3.91
White Chinook	*	*	4.98	*	*	3.29	75	722	9.65	7	29	4.01	82	751	9.15
Sockeye	900	7,744	8.60	168	1,369	8.17	2,751	24,492	8.90	795	6,422	8.08	4,614	40,027	8.72
Coho	263	1,063	4.05	13	45	3.56	1,924	10,491	5.45	240	1,008	4.19	2,440	12,607	5.31
Pink	643	1,251	1.94	15	25	1.72	1,410	3,029	2.15	17	313	1.76	2,085	4,618	2.10
Silver Brite Chum	41	67	1.62	*	*	2.07	986	2,567	2.60	381	753	1.98	1,408	3,387	2.43
Semi Brite Chum	71	130	1.83	*	*	3.00	779	1,611	2.07	753	943	1.25	1,603	2,684	1.67
Dark Chum	210	419	1.99	*	*	3.51	870	1,346	1.55	480	376	0.78	1,560	2,141	1.28
Steelhead	*	*	5.50	0	1	3.67	1	4	5.00	*	*	3.70	1	5	4.53
Total	**2,131**	**10,690**	5.02	**212**	**1,512**	6.92	**8,897**	**44,861**	5.04	**2,729**	**10,057**	3.48	**13,969**	**67,120**	4.75

TABLE 18 **Frozen Dressed Salmon Production by Year[1]**

1985 - 1996

(tonnes)

Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead
1985	3,513	9,241	5,627	6,147	10,816	137
1986	3,020	9,079	6,852	1,624	11,420	157
1987	3,323	4,819	5,642	5,507	6,079	56
1988	3,996	3,852	4,410	4,457	14,287	87
1989	3,507	10,585	4,967	6,701	4,398	35
1990	3,667	10,075	6,463	3,193	7,132	41
1991	2,705	7,511	5,415	5,497	4,456	29
1992	2,982	7,284	4,235	2,749	7,693	15
1993	3,370	15,051	2,302	3,363	7,785	4
1994	2,310	13,071	4,938	1,113	9,085	3
1995	898	2,538	2,841	3,483	5,085	2
1996	258	4,614	2,440	2,245	4,571	1

1 Includes both head-on and head-off products and No. 1 and other grades.
See Tables 16 and 17 for more detailed 1996 product and grade data for frozen dressed salmon.
Excludes farmed salmon.

TABLE 19 **Average Wholesale Price of Frozen Dressed Salmon by Year[1]**

1985 - 1996

($/kg)

Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead
1985	9.78	7.52	6.84	3.11	3.93	5.06
1986	7.87	8.63	6.68	3.13	3.77	4.77
1987	9.58	10.40	8.52	4.26	5.35	5.62
1988	12.26	14.27	10.63	5.52	6.01	6.93
1989	7.65	9.04	5.40	3.14	3.78	5.34
1990	7.15	8.07	6.11	2.85	3.75	5.69
1991	7.63	7.28	5.76	2.44	3.30	4.38
1992	7.94	9.20	5.79	2.49	3.44	4.90
1993	6.02	7.04	5.60	2.95	2.83	4.35
1994	7.59	11.45	6.39	2.76	2.60	4.06
1995	7.16	8.28	4.97	2.29	2.19	3.31
1996	6.40	8.68	5.17	2.06	1.80	4.92

1 Includes both head-on and head-off products and No. 1 and other grades.
See Tables 16 and 17 for more detailed 1996 product and grade data for frozen dressed salmon.
Excludes farmed salmon.

TABLE 20 **Fresh Dressed Salmon Production by Year[1]**

1985 - 1996

(tonnes)

Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead
1985	363	718	513	803	273	9
1986	491	678	1,011	275	1,252	11
1987	496	494	974	728	1,026	3
1988	392	399	582	551	1,572	10
1989	262	972	719	892	1,237	6
1990	589	1,886	995	616	2,216	4
1991	476	1,173	757	1,831	1,644	0
1992	658	1,614	891	1,130	1,717	3
1993	673	2,744	637	996	2,258	1
1994	510	2,293	855	453	2,855	0
1995	216	841	517	1,005	4,059	2
1996	149	459	551	339	2,331	0

1 Includes both head-on and head-off products.

TABLE 21 **Average Wholesale Price of Fresh Dressed Salmon by Year[1]**

1985 - 1996

($/kg)

Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead
1985	7.89	6.87	5.79	2.73	3.14	5.17
1986	6.46	8.11	5.74	2.74	2.72	5.85
1987	9.00	9.05	7.32	3.79	4.70	4.75
1988	9.42	11.87	6.87	3.76	5.18	5.38
1989	6.04	7.62	4.36	2.70	3.39	4.89
1990	6.22	6.64	4.27	2.82	3.41	7.01
1991	5.70	6.33	4.10	2.19	3.92	4.02
1992	5.70	9.22	4.51	2.21	2.84	4.41
1993	5.52	5.79	4.34	1.99	2.51	3.78
1994	6.28	9.60	4.64	3.16	2.12	4.34
1995	6.79	6.59	4.23	2.11	2.03	5.08
1996	6.63	8.71	4.47	1.97	1.86	2.50

1 Includes both head-on and head-off products.

TABLE 22 Quantity and Wholesale Value of Cold, Hot and Specialty Smoked Salmon Products by Species - 1996

Species	Cold Smoked			Hot Smoked			Specialty Smoked			Total Smoked Products		
	(t)	($'000)	($/kg)	(t)	($'000)	($/kg)	(t)	($'000)	($/kg)	(t)	($'000)	($/kg)
Chinook	51	973	19.30	14	270	18.26	7	278	42.08	72	1,521	21.18
Sockeye	471	10,553	22.41	10	215	22.22	57	1,360	23.95	538	12,128	22.57
Coho	105	2,192	20.80	3	55	19.42	1	9	15.04	109	2,256	20.73
Pink	4	58	16.06	6	124	19.15	*	*	12.06	10	182	14.05
Chum	150	2,382	15.80	84	633	7.52	157	987	6.27	391	4,002	10.2
Steelhead	-	-	-	*	*	20.26	-	-	-	*	*	20.26
Total	**781**	**16,158**	20.69	**117**	**1,297**	11.06	**222**	**2,634**	11.92	**1,120**	**20,089**	17.84

TABLE 23 Quantity and Wholesale Value of Salmon Roe Products by Species and Grade - 1996

Species	Caviar			Suchiko			Salmon Roe			Roe for Bait			Total Roe Products		
	(t)	($'000)	($/kg)	(t)	($'000)	($/kg)	(t)	($'000)	($/kg)	(t)	($'000)	($/kg)	(t)	($'000)	($/kg)
Chinook	*	*	25.82	*	*	18.68	2	21	10.81	2	30	14.75	4	51	17.55
Sockeye	14	501	35.42	8	51	6.73	49	274	5.58	*	*	16.57	71	826	11.68
Coho	*	*	14.96	*	*	6.01	9	27	2.97	*	*	16.57	9	27	6.06
Pink	*	*	17.46	0	4	17.44	29	101	3.53	*	*	16.57	29	105	4.94
Chum	201	4,497	22.35	11	94	8.58	62	450	7.23	15	134	8.95	289	5,175	17.88
Steelhead	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**215**	**4,998**	23.19	**19**	**149**	11.17	**151**	**873**	5.78	**17**	**164**	11.16	**402**	**6,184**	15.49

B) Herring

Landings

In 1996, total herring landings fell 7 percent to 22,573 tonnes from 27,036 tonnes in 1995, while the total landed value rose 6 percent to $99.7 million from $93.6 million.

Wholesale Value

The total wholesale value of herring in 1996 was down 18 percent to $191.1 million from $207.8 million in 1995. The wholesale value of herring roe production was $163.4 million and contributed 86 percent of the value of all herring products.

Product Mix

Combined roe herring production, including herring meal, oil, spawn on kelp, and roe products, worth $187 million, accounted for 98 percent of the total wholesale value of all herring production. The wholesale value of herring bait products was $1.4 million with other herring products including fresh, kippered snacks, dry-salted, and pickled herring totaling $2.6 million.

TABLE 24

Roe Herring Landings and Wholesale Value of Roe Herring Products
1985 - 1996

Year	LANDINGS		WHOLESALE VALUE		
	Weight[1] (tonnes)	Value[1] ($'000)	Roe ($'000)	Spawn on Kelp ($'000)	Total Value[2] ($'000)
1985	24,588	62,050	91,792	5,699	100,115
1986	15,732	45,610	77,474	6,372	85,454
1987	37,029	106,824	155,074	10,444	170,132
1988	30,070	95,117	155,158	12,934	171,860
1989	40,423	75,794	140,790	8,711	154,484
1990	40,307	79,906	153,897	8,304	164,863
1991	38,903	57,636	132,940	8,852	144,166
1992	33,923	59,474	120,316	8,949	133,501
1993	40,211	82,158	152,726	11,874	168,199
1994	40,215	89,825	166,011	17,125	187,257
1995	26,535	89,224	177,644	22,202	201,369
1996	22,187	99,500	164,902	22,224	188,556

1 Includes spawn on kelp.
2 Includes roe herring by-products and confidential items where less than three companies reported.

TABLE 25

Food and Bait Herring Landings and Wholesale Value
1985 - 1996

Year	LANDINGS		WHOLESALE VALUE		
	Weight (tonnes)	Value ($'000)	Frozen For Food ($'000)	Bait ($'000)	Total Value[1] ($'000)
1985	1,367	1,055	68	2,012	3,017
1986	759	599	256	1,494	2,833
1987	780	528	545	1,945	3,518
1988	1,531	1,340	178	2,212	3,676
1989	585	526	66	1,973	3,298
1990	973	1,567	1,381	1,738	4,410
1991	1,127	637	90	1,893	3,080
1992	944	843	*	2,961	3,545
1993	1,111	878	*	2,438	3,736
1994	687	447	91	2,176	6,727
1995	501	478	*	1,740	6,411
1996	386	200	*	1,365	2,545

1 Includes other food and bait herring products and confidential items where less than three companies reported.

C) Halibut

Landings

In 1996, the halibut catch totaled 5,431 tonnes for a total value of $32.5 million. The harvest was up 26 percent from 1995 while the value to fishers fell 5 percent from 1995 levels.

Wholesale Value

The total wholesale value of halibut was $51.0 million in 1996, 12 percent higher than in 1995. Fresh dressed halibut was still the major product marketed with a wholesale value of $47.4 million, accounting for 93 percent of the total wholesale value of this species. Frozen dressed halibut valued at $2.0 million, contributed 4 percent to the total value of halibut production. Other fresh and frozen halibut products sold in 1996 include fillets, steaks and cheeks. Fresh fillets brought the highest price of all halibut products at $17.39 per kg.

TABLE 26 **Landings and Wholesale Value of Halibut**
1985 - 1996

Year	Total Landings (tonnes)	Landed Value ($'000)	Average Landed Price ($/kg)	Wholesale Value ($'000)
1985	3,689	13,778	3.73	18,797
1986	5,389	24,455	4.54	31,211
1987	5,444	28,326	5.20	37,897
1988	5,866	23,216	3.96	30,279
1989	4,659	18,696	4.01	27,401
1990	3,784	21,065	5.57	27,763
1991	3,241	21,771	6.72	29,062
1992	3,441	21,525	6.26	23,994
1993	4,796	30,275	6.31	37,505
1994	4,498	37,449	8.33	52,615
1995	4,320	34,106	7.89	45,385
1996	5,431	32,536	5.99	50,958

D) Groundfish

Landings

In 1996 the total groundfish catch of 146,170 tonnes was up 9 percent over the previous year's 133,588 tonnes. The harvest of individual species showed fluctuations with increased harvest levels for dogfish, rockfish, skate, pollock and turbot. The species showing a drop in harvest included lingcod, Pacific cod, sablefish and soles. The overall increase in the provincial groundfish harvest can be primarily attributed to the 19 percent rise in the combined hake harvest of on-shore, co-op and joint venture fisheries. Rockfish species contributed 16 percent to total landings, while sole contributed 4 percent. Hake (including deliveries to foreign vessels and co-op fishing arrangements) continues to be a major contributor to the total provincial groundfish harvest at 99,879 tonnes and 68 percent of the total.

The 1996 total groundfish landed value was down 15 percent from 1995, to $74.0 million. Sablefish with only 2 percent of the catch fetched the highest landed price at $7.74 per kg. and generated 32 percent of total landed value of all groundfish at $23.8 million. Rockfish was the second most dominant species group contributing 27 percent of the total at $20.0 million.

Wholesale Value

The 1996 total wholesale value of B.C. groundfish products (excluding hake co-op sales) was $119.9 million, down slightly from 1995. Rockfish species (including Pacific Ocean perch) contributed 34 percent of the total wholesale value of groundfish at $41.2 million. Sablefish with sales of $29.7 million was the second most important groundfish category with a 25 percent share. Sole, hake and lingcod all contributed significant shares of the total at 11, 6 and 6 per cent respectively.

Declines were recorded for hake, Pacific cod, lingcod, pollock and flounder. Species showing increases in total wholesale value were rockfish, dogfish, turbot and skate, up 33, 73, 44 and 145 percent respectively.

TABLE 27 **Comparative Wholesale Values of Major Groundfish Species**
1994 - 1996
($'000)

Species	1994	1995	1996
Rockfish[1]	25,360	31,110	41,242
Sablefish	36,617	34,963	29,673
Sole	14,516	12,632	12,636
Hake[2]	8,322	16,241	7,402
Lingcod	8,154	7,814	6,940
Pacific Cod	4,708	4,280	3,789
Pollock	4,386	3,571	2,938
Dogfish	986	1,648	2,846
Turbot	1,751	1,493	2,147
Skate	208	447	1,096
Flounder	114	60	32
Other Groundfish[3]	8,526	7,322	9,124
Total	**113,648**	**121,581**	**119,865**

1 Includes Pacific Ocean perch, red snapper and other rockfish.
2 Excludes over-the-side sales to foreign vessels in co-operative fishing arrangements.
3 Includes other groundfish, groundfish meal and oil, and animal feed n.e.s.

TABLE 28 **Joint Venture or Co-operative Sales of Pacific Hake to Foreign Nations by Year[1]**
1985 - 1996

Year	Landed Quantity (tonnes)	Landed Value ($'000)
1985	13,306	2,248
1986	30,136	4,379
1987	47,601	7,649
1988	49,974	7,990
1989	66,102	10,225
1990	69,293	10,916
1991	76,254	12,047
1992	69,769	11,442
1993	46,373	7,138
1994	84,154	12,863
1995	26,725	4,478
1996	66,845	11,347

1 Does not include domestic hake catch or national allocation to China, Poland and Japan.

E) Shellfish

Landings

British Columbia shellfish landings, including the harvest from aquaculture sites, totaled 31,414 tonnes in 1996. The shrimp and prawn harvest, up 10 percent to 9,392 tonnes, contributed the greatest share (30 percent) to the provincial total shellfish catch. Red and green sea urchin harvests were down 12 percent to 5,868 tonnes but still contributed a 19 percent share of the total. Oysters at 5,480 tonnes and crabs at 5,044 tonnes contributed 17 and 16 percent respectively, to the B.C. shellfish harvest total.

In terms of value to the fisher, geoducks generated the highest price at $19.67 per kg. and 27 percent of the total landed value of shellfish at $34.8 million. Shrimps and prawns combined generated $38.6 million and 30 percent of the total value of shellfish. Crabs at $23.7 million were the third most important species contributing 19 percent of the total shellfish landed value.

Wholesale Value

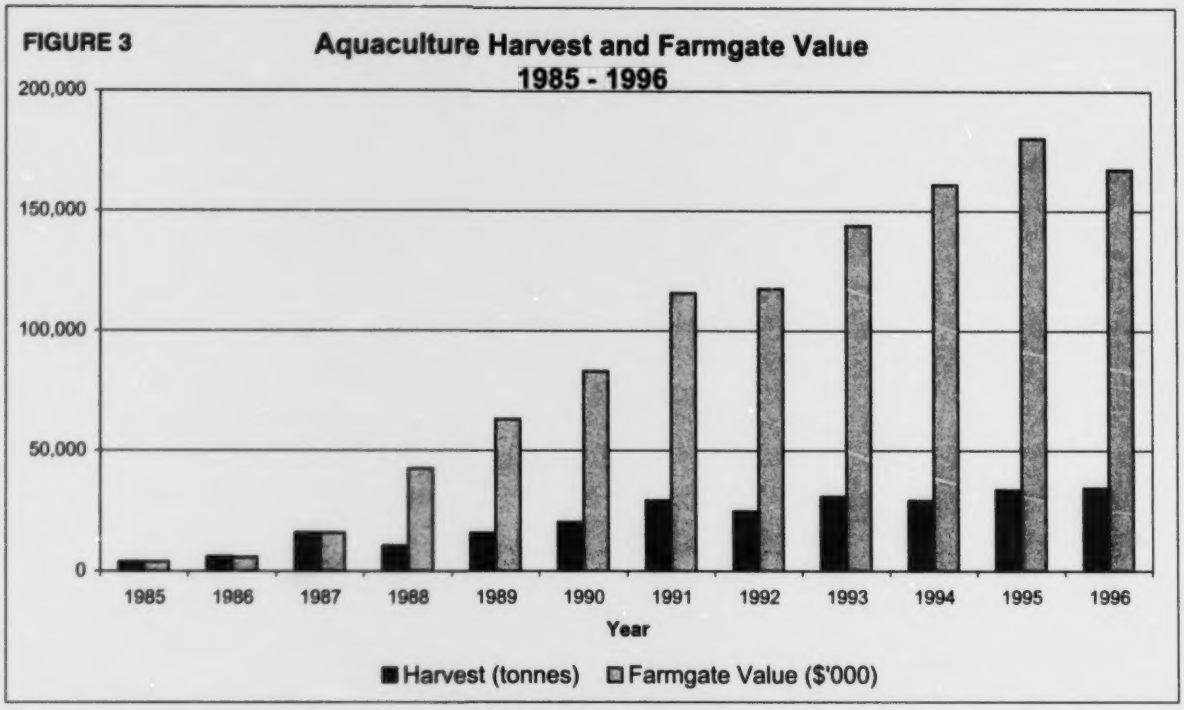
The total wholesale value of B.C. shellfish products increased 3 percent in 1996 from $149.1 million to $153.8 million. Although geoduck product sales were down 26 percent in 1996 to $33.3 million, geoducks remained the number one value-added shellfish species, contributing 22 percent to the provincial shellfish total. Geoduck neck meat sold for $53.03 per kg, while the live product sold at $24.47 per kg. Prawns moved up in importance this year to become the second highest shellfish species wholesale value generator at $29.8 million and a 19 percent share. Crab product sales rose 13 percent to $29.3 million and for a 19 percent share of the shellfish total. Sea urchin products generated 9 percent less value in 1996 than the previous year, but continued as an important species contributing $20 million and 13 percent of the total. Sea cucumber product sales were down 14 percent in 1996 generating a total of $2.5 million in wholesale value.

TABLE 29 **Comparative Wholesale Values of Major Shellfish Species 1994 - 1996 ($'000)**

Species	1994	1995	1996
Geoducks	39,649	44,943	33,274
Prawns	12,216	15,596	29,805
Crabs	34,472	25,809	29,256
Sea Urchins	18,281 [1]	21,886 [1]	19,954
Shrimp	10,226	18,341	19,720
Clams[2]	10,061 [3]	10,164	9,575
Oysters	6,870	7,668	6,797
Sea Cucumbers	3,900 [4]	2,925 [4]	2,521
Scallops[5]	822	1,049	1,500
Octopus	217	255	567
Gooseneck Barnacles	*	*	240
Squid	269	172	172
Other Shellfish	1,074 [6]	320 [7]	378 [8]
Total	**138,057**	**149,128**	**153,759**

1 Includes product derived from imported sea urchins.
2 Includes horse clams and farmed clams.
3 Includes farmed mussels.
4 Includes product derived from imported sea cucumbers.
5 Includes farmed scallops.
6 Includes mussels, gooseneck barnacles, plankton, and other shellfish n.e.s.
7 Includes wild and farmed mussels and other shellfish n.e.s.
8 Includes mussels, plankton, floating kelp, other seaweed and other shellfish n.e.s.

F) Aquaculture



Harvest and Farmgate Value

The British Columbia aquaculture industry continued to show growth in 1996 with the total farm harvest of 34,439 tonnes, up 2 per cent from 1995. The total farmgate value of the provincial aquaculture sector fell 7 percent in 1996, to $167.3 million as prices on the global market declined.

The four major aquaculture production groups were salmon, oysters, clams and rainbow trout. In 1996, the salmon harvest rose slightly to 27,757 tonnes and accounted for 81 percent of the total aquaculture harvest. With a farmgate value of $155.9 million, salmon also accounted for 93 percent of the total harvest value.

Pacific oyster harvests increased by 3 percent to 5,480 tonnes with a farmgate value of $5.7 million and 3 percent of the total aquaculture harvest value. This harvest includes a small amount of European oyster as well. Manila clam harvests were up 11 percent to 979 tonnes and a farmgate value of $4.4 million.

Scallop culture showed great growth with a harvest of 142 tonnes up from 24 tonnes in 1995 and generating $858 thousand.

The farming of rainbow trout continued to be the mainstay of the freshwater aquaculture industry in British Columbia. This year's food market harvest fell to 74 tonnes, with a farmgate value of $391 thousand. The tourist-trade-oriented Fee Fishing harvest increased 73 percent to 19 tonnes and generated $204 thousand for the sector.

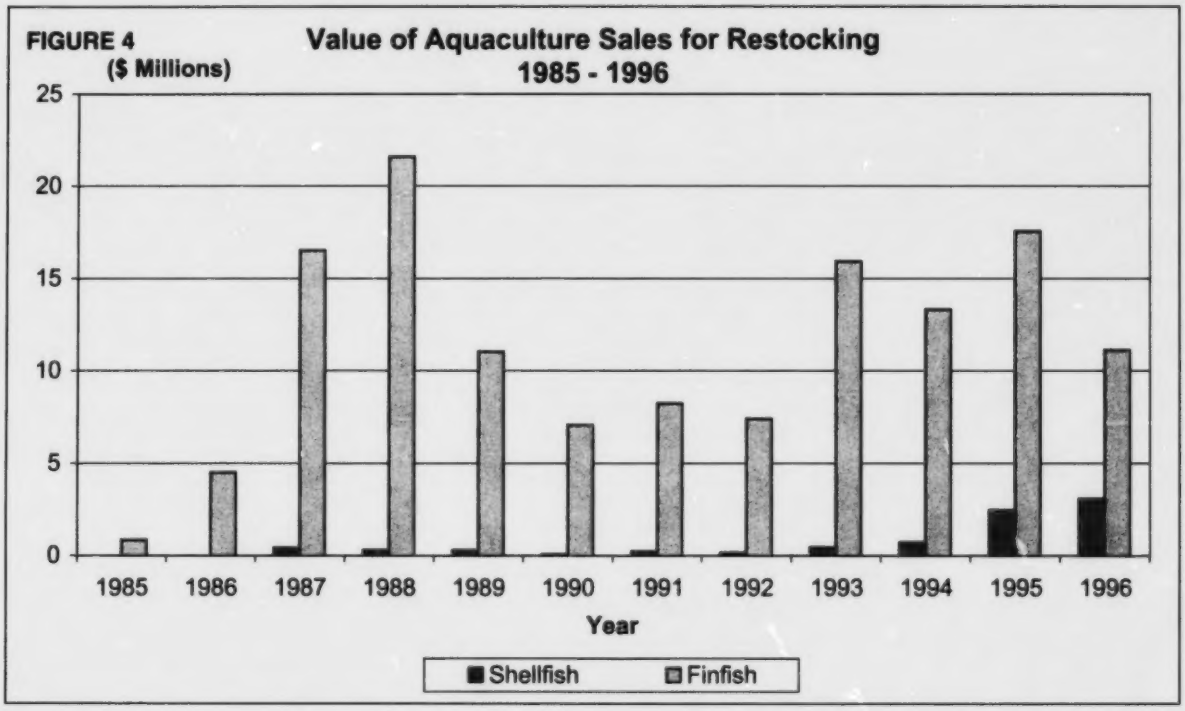
A variety of other species were cultured in small or experimental quantities in 1996. Arctic char, carp, mussels and sockeye salmon were harvested by less than 3 companies and therefore the data are confidential. Freshwater crayfish were also held on commercial aquaculture facilities but no harvests were reported for 1996.

Sales for Restocking

The sale of live fish and shellfish is a major generator of income for British Columbia's aquaculture sector, and most certainly for the shellfish and finfish hatcheries located throughout the province. In 1996 sales for restocking were reported for all stages of development from the larval and egg stages on through to the seed on cultch fry/smolt/fingerling stages and finally the broodstock stages.

In 1996 the aquaculture industry reported total sales for restocking of $14.2 million. The industry has undergone several changes in the past few years in terms of stock supplies. Initially relying on imported larvae (shellfish) and surplus Pacific salmon from DFO hatcheries the industry expanded into private hatchery operations supplying both finfish and shellfish species to the growout sites. As vertical integration began to occur the growout facilities became more closely linked to the hatcheries thus affecting the apparent sales for restocking values as internal transfers are not recorded as sales.

FIGURE 4 **Value of Aquaculture Sales for Restocking 1985 - 1996**



1. Salmon

A total of 125 marine finfish farm sites were licensed to operate during 1996.

The farmed salmon harvest of 27,757 tonnes generated $155.9 million in farmgate value in 1996. The harvest was up 2 percent in volume and 8 percent in value over 1995. Farmers reported receiving an average $5.67 per kg. for Atlantics which generated a total farmgate value of $105.5 million. In 1996, Atlantic salmon contributed 67 percent of the British Columbia total farmed salmon harvest. The chinook harvest was up 4 percent in 1996 to 8,393 tonnes with a total value of $47.5 million. The average price received by the farmer for chinook was reported at $5.66per kg. The coho harvest remained steady at 757 tonnes. The coho total farmgate value for 1996 was $2.9 million with an average price of $3.78 per kg.

In 1996 the wholesale value of farmed salmon products was down 6 percent from 1995 to $162.2 million. Fresh dressed products generated 85 percent of the value of all salmon products. At $97.7 million, fresh dressed Atlantic salmon contributed 60 percent of the total value of all farmed salmon. Fresh dressed chinook contributed another $36.8 million, or 25 percent, to the total wholesale value. Compared to 1995, farmed salmon has expanded into many more product types. Although fresh dressed products continue to dominate sales, value added products such as fillets, cans and roe are emerging.

TABLE 30 **Farmed Salmon Harvest by Species**
1985 - 1996

Year	Coho (tonnes)	Coho ($'000)	Chinook (tonnes)	Chinook ($'000)	Steelhead/ Rainbow Trout (tonnes)	Steelhead/ Rainbow Trout ($'000)	Atlantic (tonnes)	Atlantic ($'000)	Total Harvest (tonnes)	Total Harvest ($'000)
1985	66 [1]	395 [1]	54	425	*	*	-	-	120	820
1986	304	2,014	87	642	9 [2]	72 [2]	*	*	400	2,728
1987 [3]	790	4,990	949	7,018	192 [2]	864 [2]	*	*	1,931	12,872
1988 [3]	2,775	14,035	3,550	23,540	185	917	80	592	6,590	39,084
1989 [3]	1,815	8,012	8,514	42,617	274	1,061	1,280	8,049	11,883	59,739
1990 [3,4]	1,509	6,594	11,977	57,849	210	939	1,790	13,264	15,486	78,646
1991 [3]	462	1,910	20,147	86,381	102	330	3,651	22,292	24,362	110,913
1992 [3]	762	4,085	12,253	62,781	14 [2]	63 [2]	6,785	48,589	19,814	115,518
1993 [3]	2,815 [1]	12,524 [1]	10,380	54,412	*	*	12,360	71,207	25,555	138,143
1994 [3]	1,314 [1]	3,379 [1]	6,996	45,130	*	*	15,347	105,306	23,657	153,815
1995 [3]	768 [1]	3,232 [1]	8,073	49,643	*	*	18,435	117,496	27,276	170,371
1996 [3]	757	2,862	8,393	47,531	-	-	18,607	105,541	27,757	155,934

1 Includes an unspecified amount of marine pen-reared rainbow trout.
2 Includes an unspecified amount of "other" species.
3 Quantities for 1987-1996 are reported in round weight.
4 Quantities based on B.C. Salmon Farmers Association data; Values are derived using average price data from MAFF Annual Aquaculture Statistical Reports.

Source: British Columbia Annual Aquaculture Statistical Reports.

TABLE 31 **Production and Utilization of Farmed Salmon by Species**

1995 - 1996

Species	Unit	1995 Quantity	1995 Value ($'000)	1995 Average Price	1996 Quantity	1996 Value ($'000)	1996 Average Price
Atlantic							
Fresh Round	'000 kg	*	*	7.41	986	5,046	5.12
Fresh Dressed	'000 kg	15,125	113,034	7.47	15,659	97,666	6.24
Frozen Dressed	'000 kg	11	127	12.50	7	56	8.00
Frozen Steaks & Fillets	'000 kg	26	269	10.38	18	231	12.85
Fresh Steaks & Fillets	'000 kg	103	1,434	13.98	402	4,757	11.84
Smoked	'000 kg	9	226	24.32	24	440	18.33
Roe	'000 kg	*	*	5.94	*	*	6.46
Minced	'000 kg	*	*	4.59	-	-	-
Other	'000 kg	-	*	-	-	*	-
Atlantic Total		-	***117,414***	-	-	***108,528***	-
Chinook							
Fresh Round	'000 kg	*	*	6.00	*	*	5.87
Fresh Dressed	'000 kg	6,869	49,088	7.15	5,708	36,795	6.45
Frozen Dressed	'000 kg	*	*	22.54	9	1,542	17.13
Frozen Steaks & Fillets	'000 kg	36	422	11.79	68	1,072	15.67
Fresh Steaks & Fillets	'000 kg	*	*	13.77	76	777	10.18
Smoked	'000 kg	26	598	22.99	13	102	7.85
Roe	'000 kg	-	-	-	*	*	11.94
Minced	'000 kg	*	*	7.36	*	*	7.35
Other	'000 kg	-	*	-	-	*	-
Chinook Total		-	***51,365***	-	-	***49,348***	-
Coho							
Canned	48 lb. cases	-	-	-	*	*	293.76
Fresh Dressed	'000 kg	600	3,383	5.64	538	2,846	?
Frozen Dressed	'000 kg	*	*	13.15	8	12	1.55
Frozen Steaks & Fillets	'000 kg	-	-	-	*	*	14.26
Fresh Steaks & Fillets	'000 kg	-	-	-	*	*	10.35
Smoked	'000 kg	*	*	21.27	38	839	22.18
Roe	'000 kg	-	-	-	*	*	13.35
Minced	'000 kg	-	-	-	*	*	2.41
Other	'000 kg	-	*	-	-	*	-
Coho Total		-	***3,996***	-	-	***4,271***	-

TABLE 31 **Production and Utilization of Farmed Salmon by Species**

(continued) **1995 - 1996**

Species	Unit	1995 Quantity	1995 Value ($'000)	1995 Average Price	1996 Quantity	1996 Value ($'000)	1996 Average Price
Steelhead							
Fresh Round	'000 kg	*	*	7.16	-	-	-
Fresh Dressed	'000 kg	*	*	12.16	*	*	7.61
Frozen Dressed	'000 kg	*	*	7.74	-	-	-
Frozen Steaks & Fillets	'000 kg	*	*	10.91	-	-	-
Fresh Steaks & Fillets	'000 kg	-	-	-	*	*	9.37
Smoked	'000 kg	-	-	-	*	*	17.09
Roe	'000 kg	*	*	11.51	-	-	-
Minced	'000 kg	-	-	-	-	-	-
Other	'000 kg	-	-	-	-	-	-
Steelhead Total		-	*	-	-	***101***	-
All Farmed Salmon							
Canned	48 lb. cases	-	-	-	*	*	293.76
Fresh Round	'000 kg	301	2,231	7.41	2,465	13,723	5.57
Fresh Dressed	'000 kg	22,594	165,505	7.33	21,905	137,307	6.27
Frozen Dressed	'000 kg	13	180	13.85	105	1,610	15.33
Frozen Steaks & Fillets	'000 kg	62	691	11.15	86	1,303	15.15
Fresh Steaks & Fillets	'000 kg	169	2,344	13.87	479	5,547	11.58
Smoked	'000 kg	35	824	23.54	81	1,478	18.25
Roe	'000 kg	*	*	13.33	41	408	9.95
Minced	'000 kg	*	*	6.58	*	*	5.53
Other[1]	'000 kg	-	1,010	-	-	873	-
Grand Total		-	***172,785***	-	-	***162,249***	-

1 Includes "other" farmed salmon products and confidential items.

2. Freshwater Trout

The British Columbia rainbow trout industry in 1996 was comprised of 87 licensed sites. Total farm cash receipts are derived from both food market and fee fishing (U-Catch-Em) sales. In 1996, the total harvest was 93 tonnes with a value to the farmer of $595 thousand.

The 1996 harvest for food market sales was down 13 percent to 74 tonnes, with the corresponding value down 9 percent to $391 thousand compared to 1995. The farmgate value for trout sold for food market averaged $5.26 per kg., a significant increase from the 1995 average price of $5.08 per kg.

Fee-fishing sales for 1996 were valued at $204 thousand for 19 tonnes of harvest. The harvest was up 72 percent from the previous year, while the total value almost doubled. The average price paid for a kilogram of trout caught at a fee fishing facility was reported as $10.72 in 1996, compared to $9.87 in 1995.

TABLE 32 **Farmed Freshwater Trout Harvest**

1985 - 1996

Year	Food Market Sales			Fee Fishing Sales			Total	
	Harvest (tonnes)	Landed Value ($'000)	Avg. $/kg	Harvest (tonnes)	Landed Value ($'000)	Avg. $/kg	Harvest (tonnes)	Landed Value ($'000)
1985[1]	83	435	5.24	11	71	6.45	94	506
1986	101	569	5.63	11	82	7.45	112	651
1987	90	442	4.91	12	90	7.50	102	532
1988	113	505	4.47	28	184	6.57	141	689
1989	86	374	4.35	9	92	10.22	95	466
1990	109	536	4.92	7	69	9.86	116	605
1991	113	538	4.76	13	124	9.54	126	662
1992	77	324	4.21	10	150	15.00	87	474
1993	51	257	5.04	25	150	6.00	76	407
1994	75	376	5.04	39	411	10.57	114	787
1995	85	430	5.08	11	105	9.87	96	535
1996	74	391	5.26	19	204	10.72	93	595

1 1985 data was provided by the Ministry of Environment, Lands and Parks, Fisheries Branch, in B.C. Commercial Fish Farm Statistics.

3. Oysters

The oyster industry is the oldest aquaculture industry in British Columbia and continues to be the mainstay of the shellfish aquaculture sector. This industry is dominated by the production of the Pacific oyster, although the European oyster, or belon, is also cultured.

In 1996, there were 387 licensed shellfish farms. The total oyster harvest increased 3 percent from 5,326 tonnes in 1995 to 5,480 tonnes in 1996, while the farmgate value increased 5 percent from $5.4 million to $5.7 million.

Supplementing the farmed oyster harvest was a small amount of wild oysters harvested under Ministry-issued picking permits. In 1996, 2.0 tonnes of wild oysters were harvested for sale directly to seafood processors while the remaining 60.8 tonnes were used as seed stock for growout sites.

Oysters are processed primarily as either a half shell product or a packaged shucked product. The average wholesale value for half-shell oysters was $4.30 per dozen while shucked product ranged from $9.87 to $10.37 per kg.

TABLE 33 **Farmed Oyster Harvest[1]**
1985 - 1996

Year	Harvest (tonnes)	Landed Value[2] ($'000)	Wholesale Value ($'000)
1985	3,420	2,613	2,966
1986	2,864	2,515	3,254
1987	3,482	2,548	3,713
1988	3,702	2,725	3,982
1989	3,721	2,938	4,340
1990	4,547	3,613	4,595
1991	4,482	3,465	5,539
1992	4,484	3,572	5,137
1993	4,758	4,000	5,606
1994	4,990	4,566	6,870
1995	5,326	5,394	7,668
1996	5,480	5,659	6,797

1 Includes a small amount of wild oysters harvested under picking permits.
2 The landed value post-1987 has been adjusted downward to better reflect a farmgate selling price.

4. Clams

The commercial culture of clams (primarily Manila clams with some littleneck clams) began in British Columbia in the early 1980's and continues to grow. Many oyster farmers initially looked to the farming of clams as a means to diversify their production base. By 1996 farmed clams had become a significant species in the provincial shellfish aquaculture industry. Clam harvests totaled 979 tonnes in 1996, an 11 percent increase from 1995. The farmgate value increased by 14 percent to $4.4 million. Prices for raw unprocessed shellstock averaged $4.52 per kg.

Farmed clam products are combined with wild Manila and littleneck products in the data collected from the processing sector. The majority of Manila and littleneck clams undergo minimal processing. In 1996 most clams were marketed as fresh product with an average wholesale selling price of $5.18 per kg.

TABLE 34 **Farmed Clam Harvest**
1985 - 1996

Year	Harvest (tonnes)	Landed Value ($'000)
1985	4	4
1986	7	14
1987	25	43
1988	30	49
1989	31	96
1990	39	140
1991	169	556
1992	308	1,003
1993	347	1,162
1994	542	1,894
1995	885	3,885
1996	979	4,427

5. Scallops

Scallop culture began in B.C. in the late 1980's and the first commercial harvests were recorded in 1988. In 1996 142 tonnes of production sold for an average of $6.10 per kg. and generated $858 thousand in farmgate value.

TABLE 35 **Farmed Scallop Harvest**
1988 - 1996

Year	Harvest (tonnes)	Landed Value ($'000)
1988	*	*
1989	*	*
1990	*	*
1991	*	*
1992	6	24
1993	17	97
1994	27	155
1995	24	157
1996	142	858

G) Major Species by Product Type

The following table provides a summary of catch and landed value data as well as data on the final quantity, wholesale value for each species and average wholesale price for each product type. Virtually all tables throughout the report use data from this table.

TABLE 36 Landings and Products Processed in B.C. - 1996[1]

Species	Quantity	Value ($'000)	Avg. Price[2]
CLAMS			
Butter Clams			
Landed[3]	-	-	-
Processed:			
Canned (48 lb. cases)	1,007	82	81.89
Nectar (48 lb. cases)	1,258	46	36.49
Other[4]	-	117	-
Total Wholesale Value	-	**245**	-
Geoduck Clams			
Landed	1,768	34,782	19.67
Processed:			
Live	1,291	31,594	24.47
Neck Meat	26	1,359	53.03
Body Meat	24	190	8.03
Other[5]	-	131	-
Total Wholesale Value	-	**33,274**	-
Japanese/Manila & Native Littleneck Clams			
Landed[3]	-	-	-
Processed:			
Fresh	1,455	7,531	5.18
Frozen	56	225	4.04
Other[6]	-	1,068	-
Total Wholesale Value	-	**8,824**	-
Other Clams			
Landed[7]	2,423	8,272	3.41
Processed:			
Other[8]	-	506	-
Total Wholesale Value	-	**506**	-

TABLE 36	Landings and Products Processed in B.C. - 1996[1]		
Species	**Quantity**	**Value ($'000)**	**Avg. Price[2]**
CRABS			
Landed	5,044	23,741	4.71
Processed:			
Live	860	5,958	6.93
In Shell, Fresh	2,542	14,293	5.62
In Shell, Frozen	33	350	10.48
Meat, Fresh	40	1,153	29.13
Meat, Frozen	107	3,176	29.77
Cooked	442	3,312	7.50
Other[9]	-	1,014	-
Total Wholesale Value	-	**29,256**	-
DOGFISH			
Landed	4,000	2,400	0.60
Processed:			
Fresh Round	3,206	1,809	0.56
Frozen	484	821	1.70
Other[10]	-	216	-
Total Wholesale Value	-	**2,846**	-
EULACHONS			
Landed	30	60	2.00
Processed:			
Other[11]	-	46	-
Total Wholesale Value	-	**46**	-
FLOUNDER			
Landed[12]	-	-	-
Processed:			
Fresh Round	6	17	2.71
Fillets, Fresh	1	8	5.62
Other[13]	-	7	-
Total Wholesale Value	-	**32**	-
GOOSENECK BARNACLES			
Landed	14	129	9.21
Processed:			
Fresh	21	240	11.28
Total Wholesale Value	-	**240**	-
HAKE[14]			
Landed	33,034	3,336	0.10
Processed:			
Fresh Round	12,151	1,308	0.11
Frozen	34	21	0.62
Other[15]	-	6,073	-
Total Wholesale Value	-	**7,402**	-

TABLE 36	Landings and Products Processed in B.C. - 1996[1]		
Species	**Quantity**	**Value ($'000)**	**Avg. Price[2]**
HALIBUT			
Landed	5,431	32,536	5.99
Processed:			
Fresh Dressed	5,149	47,449	9.21
Frozen Dressed	216	1,982	9.17
Fillets, Fresh	10	177	17.39
Fillets, Frozen	38	580	15.08
Steaks, Frozen	34	441	12.99
Cheeks	6	68	11.79
Other[16]	-	261	-
Total Wholesale Value	-	**50,958**	-
HERRING			
Landed[17]	22,573	99,650	4.41
Processed:			
Fresh	3	9	2.51
Bait, Fresh or Frozen	696	1,365	1.96
Pickled	129	1,124	8.69
Roe, Mature	2,921	163,424	55.95
Roe, Immature	90	1,478	16.43
Spawn on Kelp	352	22,224	63.18
Other[18]	-	1,477	-
Total Wholesale Value	-	**191,101**	-
LINGCOD			
Landed	2,500	4,700	1.88
Processed:			
Fresh Round	873	1,988	2.28
Fresh Dressed	406	1,617	3.98
Frozen Dressed	140	484	3.47
Fillets, Fresh	246	1,684	6.85
Fillets, Frozen	70	442	6.34
Other[19]	-	725	-
Total Wholesale Value	-	**6,940**	-
MACKEREL			
Landed	83	33	0.40
Processed:			
Fresh or Frozen Bait	64	197	3.07
Other[20]	-	386	-
Total Wholesale Value	-	**583**	-
MUSSELS			
Landed[12]	-	-	-
Processed:			
Other[21]	-	153	-
Total Wholesale Value	-	**153**	-

TABLE 36	Landings and Products Processed in B.C. - 1996[1]		
Species	**Quantity**	**Value ($'000)**	**Avg. Price[2]**
OCTOPUS			
Landed	197	716	3.63
Processed:			
Fresh	95	337	3.54
Frozen	34	134	3.91
Other[22]	-	96	-
Total Wholesale Value	-	**567**	-
OYSTERS			
Landed	5,480	5,659	1.03
Processed:			
In Shell	22	283	12.65
Half Shell (dozens)	771,636	3,315	4.30
Meat, Fresh, 8 oz.	49	510	10.37
Meat, Fresh, 16 oz.	34	342	9.94
Meat, Fresh, 32 oz.	226	2,232	9.87
Other[23]	-	115	-
Total Wholesale Value	-	**6,797**	-
PACIFIC COD			
Landed	700	700	1.00
Processed:			
Fresh Round	137	138	1.01
Frozen	5	12	2.36
Fillets, Fresh	399	2,887	7.24
Fillets, Frozen	42	251	5.93
Roe	21	43	2.01
Other[24]	-	458	-
Total Wholesale Value	-	**3,789**	-
PACIFIC OCEAN PERCH			
Landed[28]	-	-	-
Processed:			
Fresh Round	1,936	4,685	2.42
Frozen Round	55	100	1.81
Fillets, Fresh	476	2,553	5.36
Fillets, Frozen	285	1,305	4.58
Other[25]	-	87	-
Total Wholesale Value	-	**8,730**	-
POLLOCK			
Landed	2,100	900	0.43
Processed:			
Fresh Round	337	155	0.46
Frozen	277	1,085	3.92
Fillets, Fresh	113	166	1.47
Fillets, Frozen	123	429	3.50
Roe	29	136	4.69
Other[26]	-	967	-
Total Wholesale Value	-	**2,938**	-

TABLE 36 Landings and Products Processed in B.C. - 1996[1]

Species	Quantity	Value ($'000)	Avg. Price[2]
PRAWNS			
Landed	1,759	26,649	15.15
Processed:			
Live	170	3,019	17.80
Fresh	126	1,684	13.33
Frozen, Whole	1,248	24,330	19.50
Other[27]	-	772	-
Total Wholesale Value	-	**29,805**	-
RED SNAPPER			
Landed[28]	-	-	-
Processed:			
Fresh Round	618	2,504	4.05
Frozen Dressed	34	67	1.95
Fillets, Fresh	1,309	6,592	5.04
Fillets, Frozen	175	1,179	6.73
Other[29]	-	403	-
Total Wholesale Value	-	**10,745**	-
ROCKFISH			
Landed[30]	22,803	20,024	0.88
Processed:			
Live	108	509	4.72
Fresh Round	5,198	11,340	2.18
Frozen Round	55	104	1.88
Fresh Dressed	39	212	5.50
Frozen Dressed	139	869	6.25
Fillets, Fresh	1,255	6,610	5.26
Fillets, Frozen	450	1,798	3.99
Other[31]	-	325	-
Total Wholesale Value	-	**21,767**	-
SABLEFISH			
Landed	3,069	23,749	7.74
Processed:			
Fresh Round	30	230	7.74
Fresh Dressed	9	79	8.83
Frozen Dressed, Japanese Cut	2,411	28,815	11.95
Smoked Dressed	10	190	19.19
Fresh and Frozen Fillets	10	108	11.16
Other[32]	-	251	-
Total Wholesale Value	-	**29,673**	-

TABLE 36 Landings and Products Processed in B.C. - 1996[1]

Species	Quantity	Value ($'000)	Avg. Price[2]
SALMON (FARMED)			
Landed	27,757	155,934	5.62
Processed:			
Fresh Round	2,465	13,723	5.57
Fresh Dressed	21,905	137,307	6.27
Fresh Steaks & Fillets	479	5,547	11.58
Frozen Dressed	105	1,610	15.33
Frozen Steaks & Fillets	86	1,303	15.15
Smoked	81	1,478	18.25
Roe	41	408	9.95
Other[33]	-	873	-
Total Wholesale Value	-	**162,249**	-
SALMON (WILD)			
Landed[34]	34,146	99,205	2.91
Processed:[35]			
Fresh Round	609	1,746	2.87
Frozen Round	127	220	1.74
Fresh Dressed	3,831	12,473	3.25
Frozen Dressed	14,146	67,178	4.75
Frozen Steaks & Fillets	1,867	14,672	7.85
Salted	549	7,638	13.47
Smoked[36]	1,140	20,333	17.83
Canned[37] (48 lb. cases)	945,291	144,037	152.37
Portion Pack/Specialty Products	436	6,675	15.32
Caviar[38]	244	5,343	21.71
Roe[39]	172	1,117	6.90
Minced	99	211	4.76
Other[40]	-	3,748	-
Total Wholesale Value	-	**285,391**	-
SCALLOPS[41]			
Landed	251	1,394	5.55
Processed:			
In Shell, Fresh	131	883	6.74
Fresh and Frozen Meat	24	431	18.29
Other[42]	-	186	-
Total Wholesale Value	-	**1,500**	-
SEA CUCUMBERS			
Landed	384	688	1.79
Processed:			
Meat, Fresh and Frozen	75	1,577	21.11
Skins	45	944	21.00
Total Wholesale Value	-	**2,521**	-

TABLE 36 Landings and Products Processed in B.C. - 1996[1]

Species	Quantity	Value ($'000)	Avg. Price[2]
SEA URCHINS			
Green Sea Urchins			
Landed	115	748	6.50
Processed:			
Whole	115	797	6.90
Total Wholesale Value	-	**797**	-
Red Sea Urchins			
Landed	5,753	11,358	1.97
Processed:			
Whole	711	1,499	2.11
Roe in trays	149	6,434	43.23
Roe, bulk	239	11,224	47.01
Total Wholesale Value	-	**19,157**	-
SHRIMP			
Landed	7,633	11,992	1.57
Processed:			
Fresh	7,576	10,990	1.45
Frozen	152	1,564	10.31
Shrimp Meat, Fresh	443	4,288	9.68
Shrimp Meat, Frozen	230	2,557	11.13
Other[43]	-	321	-
Total Wholesale Value	-	**19,720**	-
SKATE			
Landed	1,293	595	0.46
Processed:			
Fresh	174	147	0.84
Frozen	135	238	1.76
Wings, Skin On	40	82	2.04
Wings, Skinless	51	153	3.02
Other[44]	-	476	-
Total Wholesale Value	-	**1,096**	-
SMELT			
Landed	1	3	2.69
Processed:			
Other[45]	-	11	-
Total Wholesale Value	-	**11**	-

TABLE 36 Landings and Products Processed in B.C. - 1996[1]

Species	Quantity	Value ($'000)	Avg. Price[2]
SOLE			
Dover Sole			
Landed[46]	-	-	-
Processed:			
Fresh Round	200	190	0.95
Frozen Round	61	136	2.23
Fillets, Fresh	461	3,477	7.54
Fillets, Frozen	139	1,132	8.12
Other[47]	-	8	-
Total Wholesale Value	-	**4,943**	-
English Sole			
Landed[46]	-	-	-
Processed:			
Fresh Round	50	58	1.16
Fillets, Fresh	117	837	7.13
Fillets, Frozen	62	572	9.19
Other[48]	-	60	-
Total Wholesale Value	-	**1,527**	-
Petrale Sole			
Landed[46]	-	-	-
Processed:			
Fresh Round	64	237	3.69
Frozen Round	19	67	3.54
Fillets, Fresh	35	440	12.67
Fillets, Frozen	10	94	9.60
Total Wholesale Value	-	**838**	-
Rock Sole			
Landed[46]	-	-	-
Processed:			
Live	3	7	2.87
Fresh Round	63	71	1.13
Frozen Round	18	48	2.72
Fillets, Fresh	125	1,082	8.65
Fillets, Frozen	150	1,472	9.81
Other[49]	-	4	-
Total Wholesale Value	-	**2,684**	-
Other Sole			
Landed[46]	5,222	4,800	0.92
Processed:			
Fresh Round	928	1,960	2.11
Frozen Round	104	282	2.73
Fillets, Fresh	41	218	5.31
Fillets, Frozen	29	125	4.29
Other[50]	-	59	-
Total Wholesale Value	-	**2,644**	-

TABLE 36 Landings and Products Processed in B.C. - 1996[1]

Species	Quantity	Value ($'000)	Avg. Price[2]
SQUID			
Landed	87	99	1.14
Processed:			
Fresh	35	53	1.50
Fresh and Frozen Bait	26	37	1.42
Other[51]	-	82	-
Total Wholesale Value	-	**172**	-
STURGEON			
Landed	0	0	1.00
Processed:			
Fresh	0	2	4.74
Total Wholesale Value	-	**2**	-
TROUT (FARMED)			
Landed	74	391	5.28
Processed:[52]			
Fresh Round	12	75	6.08
Fresh Dressed	71	426	5.97
Fresh Steaks & Fillets	4	43	11.18
Other[53]	-	97	-
Total Wholesale Value	-	**641**	-
TUNA			
Landed	457	1,230	2.69
Processed:			
Fresh	308	5,527	17.97
Frozen	611	2,196	3.59
Other[54]	-	924	-
Total Wholesale Value	-	**8,647**	-
TURBOT			
Landed	4,596	1,400	0.30
Processed:			
Fresh Round	2,276	506	0.22
Fillets, Fresh	76	161	2.13
Fillets, Frozen	522	1,449	2.78
Other[55]	-	31	-
Total Wholesale Value	-	**2,147**	-
MISCELLANEOUS FISH			
Landed[56]	631	663	1.05
Processed:			
Other Products[57]	-	9,525	-
Total Wholesale Value	-	**9,525**	-

Table 36 Footnotes

1 Includes wholesale values and processed weights of fish imported and processed as a product of British Columbia.
2 Value divided by quantity may not equal average price due to rounding.
3 Included in "other clams".
4 Includes chowder, nectar, fresh and frozen meat, and fresh and frozen butter clam products.
5 Includes frozen meat and other geoduck products.
6 Includes fresh and frozen meat and live littleneck and Manila clam products.
7 Includes butter, Manila and littleneck clams, "other clams" and farmed clams.
8 Includes bait, fresh, frozen, fresh and frozen meat, horse clams and other "other clam" products.
9 Includes canned and other crab products.
10 Includes fins and tails and other dogfish products.
11 Includes fresh and frozen eulachon products.
12 Included in miscellaneous fish.
13 Includes frozen round, frozen fillets and live flounder products.
14 Excludes 66,845 tonnes of hake valued at $11,347,000 delivered to foreign vessels in joint venture fishing arrangements.
15 Includes frozen round, frozen fillets, surimi and other hake products.
16 Includes frozen fletches, blocks and other halibut products.
17 Includes herring spawn on kelp.
18 Includes fillets, frozen for food, kippered snacks, body and offal meal and dry-salted herring products.
19 Includes frozen round, frozen steaks and other lingcod products.
20 Includes fresh and frozen bait, frozen round and smoked mackerel products.
21 Includes in shell, fresh and frozen meat and other mussel products.
22 Includes bait and other octopus products.
23 Includes canned, 128 oz. fresh meat, breaded and other oyster products.
24 Includes fresh dressed, blocks, frozen round and other Pacific cod products.
25 Includes frozen dressed, fresh dressed and other Pacific Ocean perch products.
26 Includes frozen round and other pollock products.
27 Includes whole frozen cooked, frozen meat, tails and other prawn products.
28 Included in rockfish.
29 Includes fresh dressed, blocks, frozen round and other red snapper products.
30 Includes red snapper and Pacific Ocean Perch.
31 Includes blocks and other rockfish products.
32 Includes smoked fillets, frozen dressed Western cut, frozen round and other sablefish products.
33 Includes minced and canned farmed salmon products.
34 Includes salmon roe.
35 Includes salmon products derived from imported salmon.
36 Includes hot, cold and specialty smoked products.
37 Includes specialty-canned products.
38 Includes suchiko.
39 Includes salmon roe and salmon roe for bait.
40 Includes confidential items, bait, milt, offal meal and oil, heads, animal feed and other salmon products.
41 Includes farmed scallops.
42 Includes in shell frozen and other scallop products.
43 Includes canned, live and other shrimp products.
44 Includes frozen round and other skate products.
45 Includes fresh and frozen smelt products.

46 Landings for Dover, English, petrale, rock and other sole, all included under "other sole".
47 Includes fresh and frozen dressed and other Dover sole products.
48 Includes frozen round, live and other English sole products.
49 Includes fresh/frozen dressed and other rock sole products.
50 Includes blocks, dressed fresh and frozen and other "other sole" products.
51 Includes frozen for food and other squid products.
52 Includes products derived from imported fish.
53 Includes frozen dressed, canned, cold smoked, frozen steaks and fillets and other farmed trout products.
54 Includes canned and other tuna products.
55 Includes frozen, blocks and other turbot products.
56 Includes idiot fish, shark, other groundfish n.e.s., flounder, mussels, plankton, other fish n.e.s., and farmed freshwater fish n.e.s.
57 Includes smelt, mackerel, mussels, eulachons, other groundfish n.e.s., fish meal n.e.s., fish oil n.e.s., plankton, floating kelp, other seaweed, other shellfish n.e.s., other fish n.e.s., farmed freshwater fish n.e.s., and animal feed products.

III Licensing of the Fishing, Fish Processing and Aquaculture Sectors

Licences Issued by the Department of Fisheries and Oceans (DFO)

Fishers Registration Cards

In 1992 the Fishers Registration Card (FRC) replaced the Personal Commercial Fishing Licence. The total number of FRC issued by the DFO in 1996 decreased 27 percent to 9,225 from 12,683. There were 5,056 5-year cards or licences issued in previous years which were valid during 1996, bringing the total number of eligible fish harvesters to 14,164 down 25 percent from the previous year.

Vessels

A total of 4,450 vessels were licensed to fish commercially in British Columbia in 1996, down 20 percent from 1995.

Limited Entry Licences

The total number of limited entry licences issued by DFO fell from 8,473 in 1995 to 7,650 in 1996. In 1996, Aboriginal Communal Fishing Licences were issued for several Limited Entry fisheries including herring spawn-on-kelp, halibut, shrimp trawl, red sea urchin and rockfish.

Unlimited Entry Licences

The total number of unlimited entry licences issued in 1996 was down 16 percent to 3,011 from 1995. Virtually all categories showed some fluctuation in the number of licences issued. The Experimental N F Squid and the Section 68 High-Sea licence categories were added in 1996.

Licences Issued by the Ministry of Agriculture, Fisheries and Food (MAFF)

Fish Processing, Buying, Brokering and Vending Licences

Each facility or operation in British Columbia that processes or buys fish is required to be licensed by MAFF. Each type of processing and buying is represented by a different decal; therefore, each licence may have multiple decals associated with it.

The number of fish processing licences issued by MAFF fell by 7 percent to 187 from 202 in 1995. The number of processing decals issued for most categories showed little change from the previous year.

In 1996, a total of 409 fish buying licences were issued, down 21 percent compared to the 521 issued in 1995. In terms of decals 212 were issued for salmon, 130 for roe herring, 65 for other finfish, and 125 for invertebrates. A total of 372 fisherman's vending licences were issued in 1996.

Wild Harvest Permits and Licences

MAFF issued 46 oyster-picking permits in 1996, which primarily provided seed stock for aquaculture tenures with some mature product available for the processing industry. In addition, 42 marine plant harvesting licences were issued in 1996.

Non-Tidal Commercial Fishing Licences (NTF)

In 1992 MAFF accepted the responsibility for non-tidal commercial fishing licensing from the Ministry of Environment, Lands and Parks. In 1996, 39 NTF licences were issued, up 34 percent from the 29 issued in 1995.

Aquaculture Licences

In 1990 MAFF accepted the responsibility of licensing all commercial aquaculture operations in British Columbia. In this seventh year, aquaculture licences were issued to 125 marine salmon sites, 387 marine shellfish sites and 87 freshwater finfish farming operations. In addition, licences were issued to 4 shellfish hatcheries and 53 finfish hatcheries.

TABLE 37

Fishers Registration Cards Issued by the Department of Fisheries and Oceans by Field Office

1994 - 1996

Field Office	1994		1995		1996	
	1-Year	5-Year [3]	1-Year	5-Year [3]	1-Year	5-Year [3]
Alert Bay	106	-	75	-	-	-
BC Government Agent	-	-	149	-	-	-
Campbell River	1,027	133	1,266	-	1,143	-
Comox	801	-	866	-	534	-
Duncan	169	-	174	-	93	-
Kamloops	16	-	19	-	8	-
Madeira Park	206	-	200	-	160	-
Mission	158	-	163	-	102	-
Nanaimo	1,697	274	1,983	-	1,372	-
New Westminster	340	72	304	-	247	-
Parksville	290	-	292	-	-	-
Port Alberni	442	49	340	-	276	-
Port Hardy	839	95	885	-	601	-
Powell River	243	14	300	-	269	-
Prince Rupert	1,842	236	2,021	-	1,728	-
Squamish	6	-	6	-	1	-
Steveston	1,394	309	1,279	-	1,014	-
Tahsis	8	-	-	-	-	-
Tofino	199	21	247	-	217	-
Vancouver	1,156	297	1,301	-	735	-
Victoria	723	75	727	-	657	-
Whitehorse	89	-	86	-	68	-
Total Licences Issued[1]	**11,645**	**1,575**	**12,683**	**-**	**9,225**	**-**
Total Eligible Fishers[2]	**19,177**		**18,818**		**14,164**	

1 Includes licences issued as replacement licences.

2 A total of 7,750 5-year licences were valid during 1994, 6,538 during 1995, and 5,056 during 1996.

3 The 5-year licences were discontinued in 1995 and no new ones were issued after 1994.

TABLE 38

Limited Entry Licences Issued by the Department of Fisheries and Oceans 1994 - 1996

Licence Category		1994	1995	1996
Salmon				
General	A	3,605	3,564	2,800
Seine	A	538	536	488
Temporary	B	1	1	1
Gillnet, Seine, Troll and Combination	F[1]	3	3	35
Northern Native Fishing Corp. exclusive licences	N	253	254	254
Salmon Total		***4,400***	***4,358***	***3,578***
Roe Herring				
Gillnet	H	1,319	1,319	1,305
Seine	H	252	252	252
Roe Herring Total		***1,571***	***1,571***	***1,557***
Other Species				
Selected Species (Schedule II)	C	601	592	572
Geoduck Horseclam	G	55	55	55
Herring Spawn on Kelp	J	39	39	38
Herring Spawn on Kelp	F[2]	-	-	1
Sablefish	K	48	48	48
Halibut	L	432	430	428
Halibut	F[2]	-	-	5
Crab[1]	R	221	223	220
Shrimp Trawl	S	245	247	246
Shrimp Trawl	F[2]	-	-	2
Groundfish Trawl	T	142	140	141
Shrimp and Prawn by Trap[2]	W	257	253	253
Green Sea Urchin	Z-A	49	45	44
Red Sea Urchin	Z-C	110	110	105
Red Sea Urchin	F[2]	-	-	3
Sea Cucumber	Z-D	85	85	85
Euphausiid (zooplankton)	Z-F	18	18	19
Rockfish - Inside[3]	Z-N(I)	74	76	69
Rockfish - Outside[3]	Z-N(O)	181	183	180
Rockfish - Outside	F[2]	-	-	1
Other Species Total		***2,557***	***2,544***	***2,515***
Total Limited Entry Licences Issued		**8,528**	**8,473**	**7,650**

1 Aboriginal Communal Fishing Licences introduced in 1994.
2 Aboriginal Communal Fishing Licences introduced in 1996.
3 Licence categories Z-N(A) was changed to Z-N(I) and Z-N(B) was changed to Z-N(O) in 1994.
Source: Licensing Section, Department of Fisheries and Oceans, Pacific Region.

TABLE 39

Unlimited Entry Licences Issued by the Department of Fisheries and Oceans
1994 - 1996

Licence Category		1994	1995	1996
Packing	D	211	197	213
Processor	P	1	4	15
Experimental	X	56	0	41
Export	Y	20	27	13
Excess Salmon Spawning[1]		18	12	11
Transit Licence[2]		292	-	-
Section 68 High-Sea[3]		-	-	26
Experimental - N F Squid[4]		-	-	10
Subtotal		***598***	***240***	***329***
Special Fisheries - Fishing with a Vessel Z				
Squid Species	Z-E	46	81	107
Octopus - by diving	Z-G	62	57	64
Pink or Spiny Scallop - Diving	Z-I	37	29	39
Anchovy	Z-K	14	17	20
Surf and Pile Perch	Z-L	31	34	42
Food Herring (other than roe herring)	Z-M	12	9	11
Six-gill sharks	Z-O	-	-	-
Octopus - by trap[3]	Z-P	161	80	233
Pink or Spiny Scallop - Trawl[5]	Z-R	32	43	40
Bait Herring - 1 Ton Personal	Z - X	0	58	50
Bait Herring - Sale	Z - Y	0	64	69
Subtotal		***395***	***472***	***675***
Special Fisheries - Fishing Without a Vessel Z				
Mussel	Z-1	-	-	-
Clam	Z-2	1,844	2,452	1,906
Goose Barnacle	Z-6	114	64	56
Smelt	Z-8	119	112	42
Eulachon	Z-9	3	1	3
Subtotal		***2,080***	***2,629***	***2,007***
Total Unlimited Entry Licences Issued		**3,073**	**3,341**	**3,011**

1 Excess Salmon Spawning Licence category was created in 1994.
2 Transit Licence category was created in 1994.
3 Section 68 High-Sea Licence category was created in 1996.
4 Experimental - N F Squid Licence category was created in 1996.
Source: Licensing Section, Department of Fisheries and Oceans, Pacific Region.

TABLE 40

Licences Issued by the Ministry of Agriculture, Fisheries and Food[1]

1994 - 1996

Licence Category	1994	1995	1996
Processing			
Total Licences Issued	***212***	***202***	***187***
Decals			
Commercial Salmon Cannery Large	7	7	7
Commercial Salmon Cannery Small	4	4	4
Sport Caught Fish	7	4	7
Salmon	113	108	102
Roe Herring	35	31	30
Fin Fish	85	74	70
Invertebrates	89	83	79
Cold Storage Large - over $80m^3$	62	59	57
Cold Storage Small - under $80m^3$	40	39	35
Marine Plants	1	1	2
Trout Only	5	5	4
Non-human consumption	7	7	8
Buyer			
Total Licences Issued	***545***	***521***	***409***
Decals			
Salmon	289	277	212
Roe Herring	241	214	130
Fin Fish	95	77	65
Invertebrates	129	119	125
Broker			
Total Licences Issued	***22***	***20***	***16***
Decals			
Salmon	12	14	7
Roe Herring	1	4	2
Fin Fish	5	12	9
Invertebrate	5	12	7
Fisherman's Vending Licences	364	412	372
Marine Plant Harvesting Licences	44	48	42
Non Tidal Commercial Fishing Licences	34	29	39
Wild Oyster Picking Permits	31	36	46
Aquaculture Licences			
Operation Type			
Finfish Marine	111	126	125
Finfish Freshwater	85	90	87
Finfish Hatchery	52	58	53
Shellfish Marine	319	374	387
Shellfish Hatchery	3	3	4

1 Fish processing and buying licences are assigned 'decals' which indicate the category of processing or buying that may be conducted. A licence may have multiple decals. Aquaculture licences are assigned 'operation types' which indicate the category of aquaculture that may be conducted. A licence may have multiple operation types.

TABLE 41 **Distribution of Fish Processing Facilities by Region[1]**

1995 - 1996

Region Number and Description[2]	1995					1996				
	Canning Only	Cold Storage Only[3]	Canning and Cold Storage	Plant Only	Total Processing Facilities	Canning Only	Cold Storage Only[3]	Canning and Cold Storage	Plant Only	Total Processing Facilities
1 Lower Mainland	3	60	2	32	97	3	54	2	29	88
2 Southern Vancouver Is.	1	15	2	36	54	1	14	2	28	45
3 West Coast Vancouver Is.	-	2	-	5	7	-	2	-	6	8
4 Northern Vancouver Is.	1	2	-	5	8	1	3	-	5	9
5 Sunshine Coast	-	2	-	7	9	-	1	-	7	8
6 Central Coast	-	2	-	2	4	-	2	-	2	4
7 North Coast/ Prince Rupert	-	6	2	6	14	-	8	2	7	17
8 Queen Charlotte Is.	-	1	-	1	2	-	2	-	1	3
9 Interior of B.C.	-	2	-	3	5	-	1	-	2	3
Total	**5**	**92**	**6**	**97**	**200**	**5**	**87**	**6**	**87**	**185**

1 Does not include vessels that were licensed to process or companies that leased space in licensed facilities. Sports fish processing facilities are included.

2 Refer to Appendix II for map of MAFF regions.

3 This category may include facilities where fresh or frozen products were processed.

IV Employment in the Fish Processing Sector

1996 Fish Processing Employment Survey Results

In 1996 the fourth survey was conducted to gather information on the average number employees involved in the British Columbia fish processing industry. Data on the number of individuals employed on the last working day of the month or at the end of a specific processing activity (i.e. roe herring) were compiled by geographic region.

These surveys, conducted every three years, have consistently indicated that employment in the seafood processing sector peaks over the summer months. In 1996 employment ranged from a low of 3,080 in January to a high of 7,506 in August. For 1996, the average monthly employment province-wide was 4,909 a 20 percent decrease from the 6,273 recorded in 1993.

TABLE 42 **Regional Employment in the Fish Processing Sector by Month - 1996[1]**

Month	Lower Mainland	Vancouver Island	Sunshine Coast	North Coast[2]	Total
January	2,035	739	50	257	3,080
February	2,208	978	44	362	3,591
March	2,777	1,091	50	564	4,482
April	2,984	1,002	46	658	4,690
May	2,882	1,131	62	792	4,867
June	3,073	1,178	66	1,073	5,389
July	3,490	1,370	59	1,973	6,891
August	3,844	1,442	34	2,157	7,506
September	3,204	1,186	49	1,379	5,818
October	2,847	1,099	16	856	4,817
November	2,603	1,052	16	462	4,133
December	2,386	933	43	285	3,647
Average	**2,861**	**1,100**	**47**	**902**	**4,909**

1 Includes executive, administrative and sales, processing/manufacturing operations and other related workers.
2 Includes Queen Charlotte Islands, Central Coast, and Interior regions as well as persons involved in floating processing operations north of Cape Caution.

V Recovery Rates for Salmon, Farmed Fish, Groundfish, Other Fish and Shellfish

Recovery Rates and Conversion Factors for B.C. Seafood Products

The following tables were derived from original data provided by the Department of Fisheries and Oceans and two recovery rate surveys conducted by the Ministry of Agriculture, Fisheries and Food. The first of these surveys, conducted in 1985 and supplementary to the Annual Fisheries Production Statistics, provided the basis for the more detailed survey done in 1989. This latter survey collected recovery rate data on the farmed salmon industry as well as newly available information on product types, grades and species.

Recovery Rates

The recovery rate is defined as the percentage of the total final product recovered in relation to round fish weight i.e. what remains after processing into a particular product type. There is loss of weight during processing due to several factors including evisceration, skinning, deboning, or in the case of smoked products and some shellfish, loss of water. Using the recovery rate, an estimate can be made of the quantity of finished product will result from a known amount of round weight fish. For example, the recovery rate for fresh dressed head-on pink salmon is 85.8 percent; therefore, 100 pounds of round pink salmon will result in approximately 85.8 pounds of fresh dressed head-on product.

Conversion Factors

Using the conversion factor, an estimate of the amount of round fish that went into a particular product can also be made. In this case, the total weight of the processed product is multiplied by the conversion factor. For example, 100 pounds of fresh dressed head-on sockeye (with a conversion factor of 1.19) would have taken approximately 119 pounds of round fish to produce. Similarly, approximately 490 pounds of round skate (conversion factor 4.90) would be required to produce 100 pounds of skinless skate wing product.

For most fish and shellfish only one product can be derived. An exception to this is dogfish from which flaps, backs, fins and tails can all be recovered from a single individual. Similarly, a single geoduck clam can be made into both neck and body meat products. As a rule, only one product per species should be used for any conversions to round weight. When calculating the potential product from round weight, however, all product types can be considered.

There are some products in the following tables that can not be converted back to a round fish weight. Products such as fish and herring meal and oil are derived from, and the recovery rate and conversion factors relate to, fish frames and offal rather than round fish weights. Furthermore, fish, particularly shellfish, show varying degrees of shrinkage (water loss) from time of harvest to processing. For a few species, the shrinkage is significant and this information has been included where available. Any other anomalies in the tables are explained with footnotes.

TABLE 43 Average Recovery Rates For Wild Salmon

(Conversion Factor = 100% /Recovery Rate %)

Species and Product Types		Recovery Rate %	Conversion Factor
FRESH ROUND			
All Species		100.0	1.00
FROZEN ROUND			
All Species		100.0	1.00
FRESH DRESSED, HEAD-ON			
Chinook	- Red	85.4	1.17
	- White	85.3	1.17
Sockeye		84.0	1.19
Coho		86.2	1.16
Pink		85.8	1.17
Chum	- Silver Brite	84.4	1.19
	- Semi Brite	87.3	1.15
	- Dark	87.9	1.14
Steelhead		85.2	1.17
FRESH DRESSED, HEAD-OFF			
Chinook	- Red	78.8	1.27
	- White	78.0	1.28
Sockeye		77.4	1.29
Coho		77.0	1.30
Pink		75.4	1.33
Chum	- Silver Brite	74.6	1.34
	- Semi Brite	73.5	1.36
	- Dark	72.6	1.38
Steelhead		76.6	1.31
FROZEN DRESSED, HEAD-ON, NO.1 GRADE			
Chinook	- Red	87.8	1.14
Sockeye		87.2	1.15
Coho		86.5	1.16
Pink		85.5	1.17
Chum	- Silver Brite	84.5	1.18
	- Semi Brite	77.7	1.29
	- Dark	78.6	1.27
Steelhead		89.8	1.11
FROZEN DRESSED, HEAD-ON OTHER GRADES			
Chinook	- Red	n/a	
Sockeye		88.9	
Coho		81.0	
Pink		81.5	
Chum	- Silver Brite	n/a	n/a
	- Semi Brite	n/a	n/a
	- Dark	n/a	n/a
Steelhead		81.5	

TABLE 43 **Average Recovery Rates For Wild Salmon**

(continued) **(Conversion Factor = 100% /Recovery Rate %)**

Species and Product Types		Recovery Rate %	Conversion Factor
FROZEN DRESSED, HEAD-OFF, NO.1 GRADE			
Chinook	- Red	77.1	1.30
	- Pink	77.5	1.29
	- White	76.9	1.30
Sockeye		78.7	1.27
Coho		78.3	1.28
Pink		76.9	1.30
Chum	- Silver Brite	75.5	1.33
	- Semi Brite	73.4	1.36
	- Dark	71.7	1.40
Steelhead		77.1	1.30
FROZEN DRESSED, HEAD-OFF, OTHER GRADES			
Chinook	- Red	76.7	1.3
	- Pink	n/a	n/a
	- White	76.9	1.3
Sockeye		79.4	1.26
Coho		76.5	1.31
Pink		75.4	1.33
Chum	- Silver Brite	73.3	1.36
	- Semi Brite	71.8	1.39
	- Dark	72.1	1.39
Steelhead		79.6	1.26
FROZEN STEAKS AND FILLETS			
Sockeye		67.0	1.49
Coho		67.6	1.48
All other species - see values for Frozen Dressed, Head Off.			
SALTED			
Chinook	- Red	79.6	1.26
Sockeye		78.2	1.28
COLD SMOKED			
Chinook	- Red	68.8	1.45
Sockeye		65.2	1.54
Coho		65.7	1.52
Pink		55.8	1.79
Chum	- Silver Brite	68.3	1.46
	- Semi Brite	63.9	1.56
Steelhead		66.0	1.52

TABLE 43 **Average Recovery Rates For Wild Salmon**

(continued) **(Conversion Factor = 100% /Recovery Rate %)**

Species and Product Types		Recovery Rate %	Conversion Factor
HOT SMOKED			
Chinook	- Red	61.3	1.63
White		58.3	1.72
Sockeye		51.0	1.96
Coho		52.6	1.9
Pink		45.6	2.19
Chum	- Silver Brite	57.0	1.76
	- Semi Brite	54.0	1.85
OTHER SPECIALTY PRODUCTS			
All species - recovery rates variable depending on product.			
OWN CANNED PACK (lb. round/48 lb. case)			
Chinook - All speciesChinook - All species		-	73.97
Sockeye		-	67.54
Coho		-	70.77
Pink		-	75.99
Chum - All species		-	75.15
CUSTOM CANNED PACK			
All species - see values for Own Canned Pack.			
SPECIALTY CANNED PACK			
All species - see values for Own Canned Pack.			
SALMON ROE			
The average recovery from all species of round salmon is approximately 5 percent.			
MEAL			
All species		16.5	6.06 [1,3]
OIL			
All species		6.0	16.67 [1,2,3]

1 Includes an unspecified amount of groundfish.
2 Based on the assumption that a gallon of oil weighs 7.5 lb.
3 This conversion yields the quantity of waste/scrap fish required to produce the specified product.

TABLE 44 Average Recovery Rates For Farmed Fish
(Conversion Factor = 100%/Recovery Rate %)

Species and Product Types	Recovery Rate %	Conversion Factor
FRESH ROUND		
All Species	100.00	1.00
FRESH DRESSED, HEAD-ON		
Chinook	86.80	1.15
Coho	85.90	1.16
Steelhead	85.60	1.17
Atlantic	91.60	1.09
Freshwater Rainbow Trout	81.00	1.23
FRESH DRESSED, HEAD-OFF		
Chinook	78.30	1.28
Freshwater Rainbow Trout	67.00	1.49
FROZEN DRESSED, HEAD-ON		
Chinook	84.70	1.18
Coho	84.70	1.18
FROZEN FILLETS		
Chinook	62.40	1.60
Coho	61.50	1.63
COLD SMOKED		
Chinook	50.00	2.00
Coho	52.00	1.92
HOT SMOKED		
Chinook	45.00	2.22

TABLE 45 Average Recovery Rates For Groundfish and Other Fish[1]

(Conversion Factor = 100%/Recovery Rate %)

Species and Product Types	Recovery Rate %	Conversion Factor
DOGFISH		
Dressed Head-Off	45.80	2.18
Flaps	7.00	14.29
Backs	30.20	3.31
Fins & Tails	2.60	39.06
FLOUNDER		
Dressed Head-Off	80.00	1.25
Fillets, Fresh	28.50	3.51
Fillets, Frozen	26.00	3.84
HAKE		
Dressed Head-Off	55.90	1.79
Fillets, Skinless	31.90	3.13
Fillets, Boneless	27.00	3.70
HALIBUT		
Dressed Head-Off	75.20	1.33
Fillets, Fresh	52.00	1.92
Fillets, Frozen	60.00	1.67
Fletches	42.20	2.37
Steaks	52.00	1.89
HAGFISH		
Frozen	95.30	1.05
HERRING		
Bait	100.00	1.00
Fillets	35.00	2.86
Kippered Snacks	35.00	2.86
Kippers	35.00	2.86
Pickled	35.00	2.86
Roe (mature)	13.50	7.43
Meal	14.80	6.76 [2,4]
Oil	2.60	38.46 [2,3,4]
LINGCOD		
Dressed Head-Off, Fresh	67.00	1.49
Dressed Head-Off, Frozen	72.80	1.37
Fillets, Fresh	31.00	3.23
Fillets, Frozen	29.00	3.34
Steaks, Frozen	72.80	1.37
PACIFIC COD		
Dressed Head-On	83.30	1.20
Dressed Head-Off	71.90	1.39
Fillets, Fresh	26.70	3.75
Fillets, Frozen	28.00	3.57
Steaks, Frozen	71.90	1.39

TABLE 45 Average Recovery Rates For Groundfish and Other Fish[1]

(continued) (Conversion Factor = 100%/Recovery Rate %)

Species and Product Types	Recovery Rate %	Conversion Factor
PACIFIC OCEAN PERCH		
Dressed Head-Off	65.00	1.54
Fillets, Fresh	29.60	3.38
Fillets, Frozen	29.90	3.34
POLLOCK		
Dressed Head-On	88.00	1.14
Dressed Head-Off	65.00	1.54
Fillets, Fresh	27.00	3.70
Fillets, Frozen	28.90	3.46
RED SNAPPER		
Dressed Head-On	75.80	1.32
Dressed Head-Off, Fresh	65.40	1.53
Dressed Head-Off, Frozen	57.80	1.73
Fillets, Fresh	29.60	3.37
Fillets, Frozen	29.50	3.40
ROCKFISH		
Dressed Head-On	85.00	1.18
Dressed Head-Off	65.00	1.54
Fillets, Fresh	27.80	3.60
Fillets, Frozen	28.80	3.47
SABLEFISH		
Dressed, Western Cut	72.00	1.39
Dressed, Japanese Cut	67.40	1.48
Smoked, Dressed	46.50	2.15
Smoked, Fillets	50.10	2.00
SKATE		
Wings, Skin On	45.40	2.20
Wings, Skinless	20.40	4.90
SMELT		
Dressed Head-On	98.00	1.02
SOLE (General)		
Dressed	70.00	1.43
DOVER SOLE		
Fillets, Fresh	27.20	3.67
Fillets, Frozen	27.50	3.63
ENGLISH SOLE		
Fillets, Fresh	28.20	3.54
Fillets, Frozen	28.20	3.55

TABLE 45 **Average Recovery Rates For Groundfish and Other Fish[1]**

(continued) **(Conversion Factor = 100%/Recovery Rate %)**

Species and Product Types	Recovery Rate %	Conversion Factor
PETRALE SOLE		
Fillets, Fresh	32.00	3.13
Fillets, Frozen	30.00	3.33
ROCK SOLE		
Fillets, Fresh	26.00	3.85
Fillets, Frozen	25.60	3.91
OTHER SOLE		
Fillets, Fresh	28.50	3.51
Fillets, Frozen	28.60	3.49
STURGEON		
Dressed Head-On, Fresh	76.70	1.30
Dressed Head-On, Frozen	78.80	1.27
TURBOT		
Dressed Head-Off	80.00	1.25
Fillets, Fresh	28.50	3.51
Fillets, Frozen	27.00	3.70
OTHER FISH		
Meal	16.50	6.06 [2,4]
Oil (lbs.)	2.60	38.40 [2,3,4]

1 All fresh or frozen round fish are assumed to have a recovery rate 100% with a conversion factor of 1.00.
2 Includes an unspecified amount of salmon.
3 Based on the assumption that a gallon of oil weighs 7.5 lb.
4 This conversion factor yields the total pounds of waste/scrap fish required to produce the specified product.

TABLE 46 Average Recovery Rates For Wild and Farmed Shellfish[1]

(Conversion Factor = 100%/Recovery Rate %)

Species and Product Types	Recovery Rate %	Conversion Factor
BUTTER CLAMS		
Meat	30.70	3.26
GEODUCK CLAMS		
Live [2]	94.70	1.06
Neck Meat	19.80	5.05
Body Meat	12.10	8.25
HORSE CLAMS		
Neck Meat	12.00	8.33
JAPANESE AND NATIVE LITTLENECK CLAMS		
In shell, Fresh or Frozen [2]	85.00	1.18
OTHER CLAMS		
Bait	100.00	1.00
Meat (as per Butter Clams)	30.70	3.26
Canned (48 lb. case)	-	180.00
CRABS		
Meat, Fresh	20.90	4.78
Meat, Frozen	23.20	4.31
Cooked	90.70	1.10
Canned (48 lb. case)	-	250.00
GOOSENECK BARNACLES		
Fresh [2]	90.30	1.11
OCTOPUS		
Bait	100.00	1.00
OYSTERS		
Meat (8 oz. container)	-	8.04 [3]
Meat (16 oz. container)	-	14.06 [3]
Meat (32 oz. container)	-	26.2 [3]
Meat (128 oz. container)	-	115 [3]
In shell (average weight)	-	8.6 oz.
In shell, half shell (avg. weight)	-	5.2 oz.
PRAWNS		
Cooked, Whole	92.30	1.08
Tails	49.40	2.02
Meat	25.00	4.00
SCALLOPS		
In shell, Fresh or Frozen [2]	89.90	1.11
SEA CUCUMBERS		
Meat	14.70	6.81
Meat, dried	10.50	9.50
Average #/lb. of meat	-	8.00

TABLE 46 **Average Recovery Rates For Wild and Farmed Shellfish[1]**

(continued) **(Conversion Factor = 100%/Recovery Rate %)**

Species and Product Types	Recovery Rate %	Conversion Factor
SEA URCHINS - GREEN		
Roe, in trays	8.40	11.90
SEA URCHINS - RED		
Roe, in trays	7.95	12.60
Roe, in bulk	7.88	12.70
SHRIMP		
Meat, Fresh	25.50	3.93
Meat, Frozen	25.30	3.96
Canned (48 lb. case)	-	194.30
SQUID		
Bait	100.00	1.00

1 All live or in-shell shellfish, unless otherwise noted, are assumed to have a recovery rate of 100% with a conversion factor of 1.00.
2 Based on average percent shrinkage.
3 This is not a true conversion factor as it is the average number of individuals per container.

VI Consumer Price Index

TABLE 47

British Columbia Consumer Price Index For All Items and Selected Food Items

1985 - 1996
(1992 = 100)

Year	All Items	Fish and Seafood	Poultry	Meat[1]
1985	76.4	70.3	81.3	71.9
1986	78.6	72.7	78.8	75.1
1987	81.0	79.1	80.1	83.9
1988	83.9	86.0	81.7	84.1
1989	87.7	89.3	87.8	83.9
1990	92.4	91.4	93.8	91.2
1991	97.4	96.2	97.2	96.7
1992	100.0	100.0	100.0	100.0
1993	103.5	104.2	103.7	109.8
1994	105.5	108.0	102.5	110.7
1995	107.9	115.9	99.2	110.1
1996	108.9	114.3	108.4	106.8

1 Excludes poultry.
Source: BCSTATS

VII Glossary of Terms and Text Notes

Landings Data

Landed Value:

Prior to 1984, salmon landed values published did not include bonus payments. Consequently, payments made to fish harvesters, particularly for net caught salmon, were under-reported. Since 1984, salmon landed value is defined as the initial payment to fish harvesters including any additional adjustments and bonuses.

Round Weight:

The weight of the whole fish as it comes from the water before any treatment or dressing.

Source of Data:

All commercial fish landings or catch data are provided by the Department of Fisheries and Oceans, Pacific Region. Aquaculture harvest data are collected by Ministry of Agriculture, Fisheries and Food.

Standard Form or Landed Weight:

Salmon - Troll and Handline are reported as dressed weight head-on unless otherwise specified.
- Seine and Gillnet are reported as round weight.

Halibut - is reported as dressed weight head-off.

All other fish are reported as round weight.

Measurements

Tonne

One tonne equals 1,000 kilograms (kg.) or 2,204.6 pounds (lb.).

Gallon

Gallon used is imperial gallon, equals 128 ounces, and weighs 7.5 pounds.

Terms

Cold Smoked Salmon:

Includes all products, which are both brined and cold smoked.

Farmgate Price:

The average price based on the total farmgate value divided by the total quantity of the product. It is the total value the producer receives for the product exclusive of transportation and processing. It reflects a true weighted average price of the fish or shellfish, incorporating price fluctuations over the year.

Hot Smoked Salmon:

Includes products, which are brined and hot smoked or cooked - may include barbecued and jerky products.

n.e.s.:

Not elsewhere specified.

Net Selling Value:

Refers to pricing information on canned salmon products and reflects the final selling price after promotions, case allowances, cash discounts and other trade discounts which may apply.

Over the Side Sales:

Refers to co-operative fishing arrangements, or joint ventures, of Canadian fish harvesters delivering groundfish, usually hake, to foreign vessels.

Portion Pack/Specialty Products:

Includes specially packaged salmon products such as individual portion and food service portion packs. These may include variety of packaging technologies. Smoked salmon with special packaging included in the "specialty smoked salmon products" category.

Salted/Mild Cured Salmon:

Includes salmon products prepared by either brining or dry salting for human consumption.

Specialty Smoked Salmon Products:

Specialty packed smoked salmon products or products, which are derived from smoked salmon. These may include smoked salmon pate and butter as well as other products not in tins.

Wholesale Price:

The average price based on the total wholesale value divided by total quantity of that product. It reflects a true weighted average price of that product, incorporating price fluctuations over the calendar year.

Wholesale Value:

Represents gross sales based upon company invoices (F.O.B. processing plant) for fish products

Appendix I

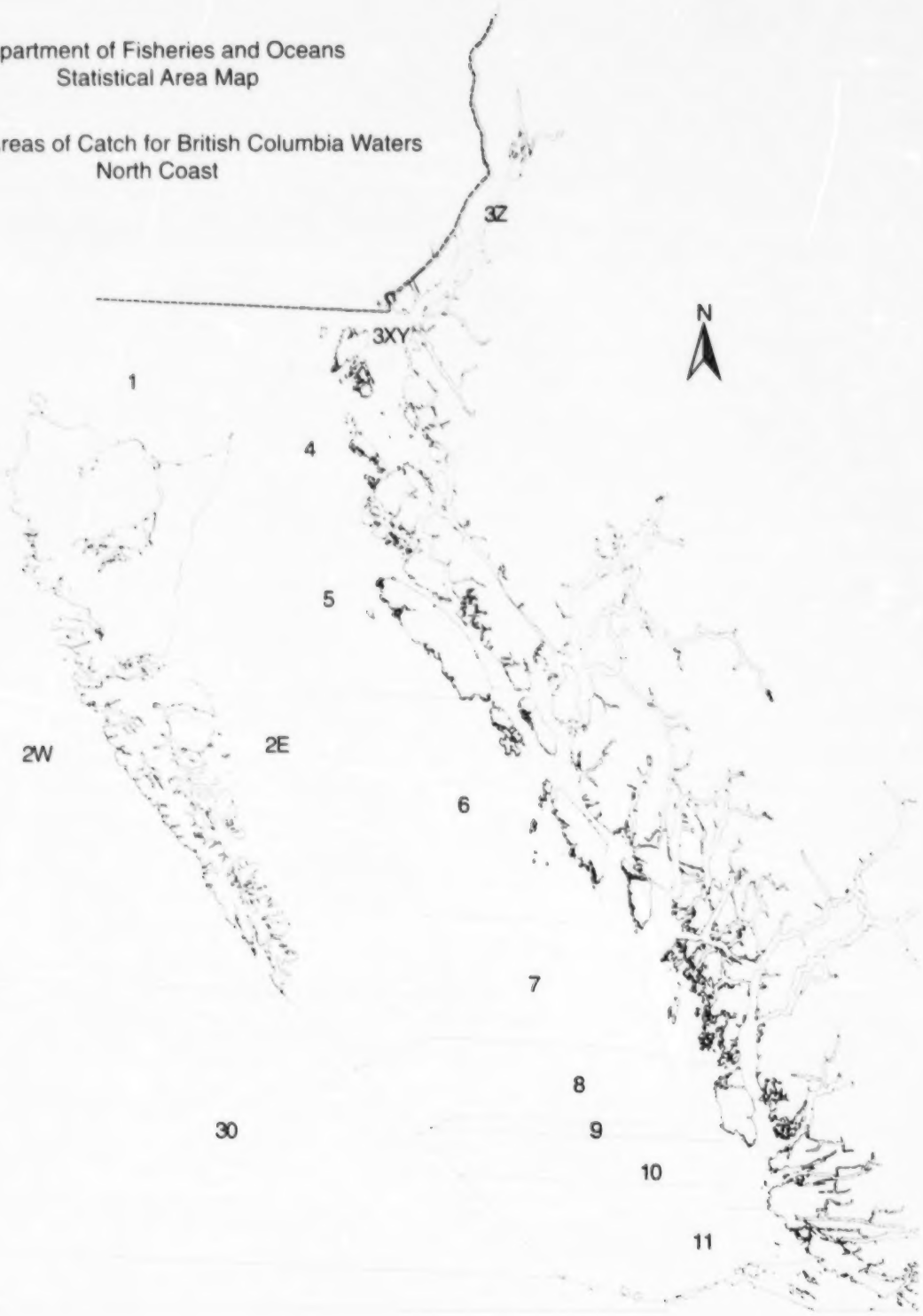
Department of Fisheries and Oceans Statistical Area Maps

Department of Fisheries and Oceans
Statistical Area Map

Showing Areas of Catch for British Columbia Waters
South Coast

Department of Fisheries and Oceans
Statistical Area Map

Showing Areas of Catch for British Columbia Waters
North Coast



Appendix II

Geographic Regions of Fish Processing Facilities in British Columbia